

# PDAC Fall 2016-2017 Book of Abstracts

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First Name	Last Name	Department
Kimberly	Abrams	Library
Alyssa Dana	Adomaitis	Business
Nora	Almeida	Library
Amanda	Almond	Social Science
Lillian	Amann	Radiology
Nina	Bannett	English
Megan	Behrent	English
Jill	Belli	English
Monica	Berger	Library
Oleg	Berman	Physics
Christopher	Blair	Biological Sciences
Emilie	Boone	African American Studies
Karl	Botchway	African American Studies
Stephanie	Boyle	Social Science
Mercer	Brugler	Biological Sciences
Juanita	But	English
Aparicio	Carranza	Computer Engineering Technology
Marco	Castillo	Social Science
Peter	Catapano	Social Science
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Jean F.	Claude	Hosp[itality Management
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Deborah	Courtney	Human Services
Susan	Davide	Dental Hygiene
Rebecca	Devers	English
Anthony	DeVito	Radiologic Technology & Medical Imaging
Javiela	Evangelista	African American Studies
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Laura	Ghezzi	Mathematics

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Shu-Ping Sandie	Han	Mathematics
Caroline	Hellman	English
Claudia	Hernandez Feiks	Architectural Technology
Jennett	Ingrassia	Radiologic Technology and Medical Imaging
Joseph	Jeyaraj	English
Delaram	Kahrobaei	Mathematics
Daeho	Kang	Environmental Control Technology
Daeho	Kang	Environmental Control Building
Nadia	Kennedy	Mathematics
Roman	Kezerashvili	Physics
Jihun	Kim	Architectural Technology
Paul	King	Architectural Technology
Paul	King	Architectural Technology
Caner	Koca	math
Lufeng	Leng	Physics
Evans	Lespinasse	Radiologic Technology & Medical Imaging
Hong	Li	Computer Systems Technology
D Robert	MacDougall	Social Sciences
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Alberto	Martinez	Chemistry
Ariane	Masuda	Mathematics
Anna	Matthews	DENTAL HYGIENE
Benito	Mendoza	Computer Engineering Technology
Diana	Mincyte	Social Science
Grazyna	Niezgoda	Matehmatics
Unurjargal	Nyambu	Social Science
Robert	Ostrom	English
Linda	Paradiso	Nursing
Archie	Porter	English
Zhijian	Qian	Humanities
Jose	Reyes Alamo	Computer Engineering Technology
Annette	Saddik	English
David	Sánchez Jiménez	Humanities
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Shauna	Vey	Humanities
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Chen	Xu	Computer Engineering Technology
Fei	Xu	Library
Ozlem	Yasar	Mechanical Engineering Technology
Mai	Zahran	Biological Sciences
Andy S.	Zhang	Mechanical Engineering Technology
Lin	Zhou	Mathematics
Zheng	Zhu	Humanities

### **Alyssa Adomaitis, PhD**

Assistant Professor  
Business

### **ABSTRACT**

Summary of focus and relevance of the session (2-3 sentences): Our session will consider the ways in which race, class, gender, and socially-constructed ideals of beauty impact different facets of the contemporary fashion (and larger) economy in the United States. Our research raises questions about how cultural notions of attractiveness impact women's and men's access to economic success in the workplace, how racism shapes African-American fashion designers' access to showing and marketing their collections within key spaces such as fashion weeks and within high-fashion magazines, and how non-professional fashion bloggers use sites such as Tumblr, Instagram, and Pinterest as a means of both marketing large brands and exploring class inequalities in the fashion industry. We look forward to opening up dialogue with the audience about the larger issues which our projects raise, about how racism, classism, and lookism permeate the fashion (and the larger U.S.) economy, and how we as citizens, consumers, and workers can best resist, undermine, and challenge these larger forces.

### **Jose Reyes Alamo**

Assistant Professor  
Computer Engineering

**ABSTRACT:**

General Education is a very important aspect of higher education. Instilled in many institutions via Student Learning Goals (SLGs), General Education provides guidelines for students to become well rounded individuals in a variety of disciplines that otherwise concentrate solely on discipline specific information. One of the strategies that can assist different disciplines in implementing General Education SLGs is Course Coordination. Many disciplines, especially in science and engineering go through accreditation processes. For instance, Computer Engineering Technology, is accredited by the Accreditation Board for Engineering and Technology (ABET). The disciplines that go through an accreditation process must comply with a set of standards. In the process of implementing Course Coordination SLGs in Computer Engineering Technology, we noticed that several of these standards were similar to the criteria used for accreditation. This paper proposes an initiative to bridge the gap between General Education and accredited Engineering Technology fields by creating a framework for other disciplines to use as a model. We show the feasibility of this framework with data collected from the Department of Computer Engineering Technology.

**Lubie G. Alatraste, Ph.D**

Associate Professor

English Department

### **The Role of Corrective Feedback in Genre-based Writing Classroom**

**ABSTRACT**

This paper describes a small-scale (N11) pilot conducted at the four-year urban USA university with freshmen second language writers learning to write discussion essays in response to short readings. The instructor applied GBI by teaching discussion genre elements and providing genre-specific corrective feedback each time students wrote by using different feedback forms from genre moves' lists, to self-assessment and peer-assessment tools. The pre- and post-writing tests were administered in order to provide a comparison baseline. The findings reveal 85% of students showed strong development of target genre elements and improvement of genre-specific communicative purpose.

**Nora Almeida**

Assistant Professor

Library

### **Critical Librarianship Workshop**

**Abstract:**

In this workshop, I will use feminist theory and political economic theory as a lens to examine critical instructional design principles and the technological platforms that we use in libraries and

classrooms. Specifically, I will explore how a critical pedagogical praxis or critical orientation towards information literacy can be represented in digital spaces. I will also analyze the influence of commercial companies on education environments and whether such digital spaces inherently privilege certain populations. I have thought about but not fully explored these ideas in recent projects I've done on library discovery environments, OER, and embedded librarianship initiatives.

**Amanda L. Almond, PhD.**

Assistant Professor

Social Science

**Abstract**

Empowerment is multifaceted and cannot be captured by a single concept. Rather, empowerment in the work role encompasses meaning, competence, self-determination, and impact (Spreitzer, 1995). Gender norms are influencing women's work experiences and thus their perception of empowerment and success, even within the field of psychology. Research on mental health professionals' experience of racial microaggressions indicate a typology of experiences, including microassault, microinsult, and microinvalidation (Hernandez et. al., 2010). Anecdotally, early-career women psychologists similarly experience these types of microaggressions related to their gender in academic and clinical settings, such as questions about their partner status, statements regarding one's decision to enter into and her experience of motherhood, and assumptions of one's abilities and interests based on her gender. Research suggests one's effective means of coping with racial microaggressions is self-care (Hernandez, et. al. 2010). An additional tool is self-compassion, which moderates feelings and cognitions following a negative experience (Leary et. al., 2007). Predictors of career satisfaction among psychologists include being able to savor positive experiences that help buffer the effects of work frustrations (Rupert et. al., 2012).

**Nina Bannett**

Associate Professor

English

**Lauren Groff's "Ghosts and Empties" and The Literary Paradigm of the Walking Woman**

**Abstract:** Lauren Groff's 2015 short story "Ghosts and Empties" explores the literary paradigm of the walking woman as depicted by Mary Austin in her 1907 story "The Walking Woman." With its dual emphasis on presence and absence, on attachment and detachment, Lauren Groff's story engages with and diverges from Austin's in significant ways. In "Ghosts and Empties," walking alone at night in a Florida suburb allows the female narrator to question domesticity without having to be connected to it: "On my nighttime walks the neighbors' lives reveal themselves, the lit windows domestic aquariums." Groff's unnamed narrator resembles Austin's Walking Woman, who exists outside of civilized society, and who is in many respects an outlaw.

“Ghosts and Empties,” like “The Walking Woman,” portrays a transgressive woman who walks alone to escape loss and societal expectations. Groff’s story, like Austin’s, emphasizes landscape over plot. However, rather than focusing on the desert of the American West, Groff’s story depicts the contemporary wasteland of the suburbs. As Rebecca Solnit asserts in her book *Wanderlust: A History of Walking* (2000): “[w]alking can become a sign of powerlessness or low status, and new urban and suburban design disdains walkers” (253). In Groff’s story as in Austin’s, “freedom” can be imagined or searched for but can’t be enacted or actualized on a large-scale. “The Walking Woman” and its contemporary counterpart “Ghosts and Empties” dramatize a fantasy of transformation that is embodied in the figure of a walking woman, a solitary woman whose footsteps go against American societal conventions and expectations as well as the grain of an American feminism which has relied heavily on collective action.

### **Megan Behrent**

Assistant Professor  
English

### **When Work is in the Play: Labor in the Eyes of the 21<sup>st</sup> Century American Playwright**

Long before the question of the fate of the American working class exploded into the midst of the 2016 elections, contemporary American playwrights have eulogized, probed and dramatized the shift from proletariat to precariat as a result of neoliberal economic and social policies. Tony Kushner’s *The Intelligent Homosexual’s Guide to Capitalism & Socialism with a Key to the Scriptures* (2011) is an elegiac depiction of the decline of labor at the center of a family drama in which generational, economic and political shifts combine to tell the story of profound shifts in work and Capital that transform individual experience and personal identity. This paper looks at recent workplace dramas that give voice to the people living this crisis and the new precarity that characterizes workplaces in the 21<sup>st</sup> century. In particular, I focus on Dominique Morisseau’s *Skeleton Crew*, the last play in her Detroit trilogy, as a powerful evocation of the state of working class America after several decades of neoliberal policies which have dismantled traditional union workplaces and ushered in an era of precarity for the vast majority of working class people.

### **Oleg Berman, PhD**

Associate Professor  
Physics

### **Towards high-temperature superfluidity of excitons in TMDC**

#### **Abstract**

Two-dimensional dipolar excitons, formed by electrons and holes, spatially separated in two parallel transition metal dichalcogenide (TMDC) atomically thin layers, form superfluid at temperatures below the critical one. The effective masses of A and B dipolar excitons, collective excitations spectrum, sound velocity and critical temperature  $T_C$  for superfluidity were obtained

for various TMDC bilayers.  $T_C$  for two-component exciton system in a TMDC bilayer is about one order of magnitude higher than  $T_C$  for any one-component exciton system, because for a two-component system  $T_C$  depends on the reduced mass of A and B excitons, which is always smaller than the individual mass of A or B exciton.

### **Christopher Blair, PhD**

Assistant Professor  
Biological Sciences

#### **Abstract**

Biodiversity reduction and loss continues to progress at an alarming rate, and thus, there is widespread interest in utilizing rapid and efficient methods for quantifying and delimiting taxonomic diversity. Single-locus species delimitation methods have become popular, in part due to the adoption of the DNA barcoding paradigm. These techniques can be broadly classified into tree-based and distance-based methods depending on whether species are delimited based on a constructed genealogy. Although the relative performance of these methods has been tested repeatedly with simulations, additional studies are needed to assess congruence with empirical data. We compiled a large data set of mitochondrial ND4 sequences from horned lizards (*Phrynosoma*) to elucidate congruence using four tree-based (single-threshold GMYC, multiple-threshold GMYC, bPTP, mPTP) and one distance-based (ABGD) species delimitation models. We were particularly interested in cases with highly uneven sampling and/or large differences in intraspecific diversity. Results showed a high degree of discordance among methods, with multiple-threshold GMYC and bPTP suggesting an unrealistically high number of species (29 and 26 species within the *P. douglasii* complex alone). The single-threshold GMYC model was the most conservative, likely a result of difficulty in locating the inflection point in the genealogies. mPTP and ABGD appeared to be the most stable across sampling regimes and suggested the presence of additional cryptic species that warrant further investigation. These results suggest that the mPTP model may be preferable in empirical data sets with highly uneven sampling or large differences in effective population sizes of species.

### **Karl Botchway**

Associate Professor  
African American Studies

#### **Abstract:**

The neo-liberal assault on the African state which resulted in a diminished capacity for the state to pursue its basic functions is currently being re-considered. By all accounts there is recognition for some form of a developmental state in Africa. But such a state arguably, will only be relevant if it develops the *capacity* to foster growth, create wealth and reduce poverty. “Wealth creation is no longer considered just a function of nature and markets: effective statecraft is involved as well.” Peter Evans captures this aspect of the state much better: “From the poorest countries of the Third World to the most advanced exemplars of welfare capitalism, one of the few universals in the history of the twentieth century is the increasingly pervasive influence of

the state as an institution and social actor. None of which is to say the existing state gives us what we need ... Analyzing what makes some states more effective than others offers less immediate satisfaction but should be more useful in the long run.

### **Stephanie Boyle**

Assistant Professor

Social Science

### **Abstract**

Serious studies of the provinces as important centers of education, knowledge, culture have only recently emerged in American academia. Generally, Egyptian history has overly represented Cairo's role in the modernization project and has cast the Delta and Upper Egypt as rural space or defined provincial Delta cities as subsidiary to the core in Cairo. Delta cities such as Tanta played an important role in urban development, the global economy, national politics, religion and public health, but has remained largely unstudied. In fact, from the 1850s to the 1890s, Tanta, the largest city in the Egyptian Delta appeared in print media throughout the world outside of Egypt as an epicenter of Cholera. Medical journals, periodicals and missionary tracts reproduced the death tolls from the 1848 Cholera epidemic that killed 3000 in Tanta. Collectively, colonial administrators, missionaries and physicians pigeon-holed Tanta as an epicenter of Cholera that threatened to spread the disease westward. While the 1848 cholera outbreak shaped how the many outside of Egypt understood Tanta, the government in Cairo response to the 1848 epidemic changed over the course of the 19th century

### **Juanita But**

Assistant Professor

English

### **Telling Stories: A lesson from Walter Benjamin and Carlos Bulosan**

In this paper, I will examine the discursive role of the critic/reader in relation to Benjamin's storyteller. I will also illustrate the way this connection was able to engage students in the art of close reading in an undergraduate Asian American literature classroom. In particular, I will discuss how students acquired their critical perspective through the experience of close, parallel reading of Benjamin's "The Storyteller," which is based on his reading of the work of Leskov, a German author, and the work of Carlos Bulosan, a Filipino American author.

In this class, not only was Benjamin's text able to set up a structure for reading Bulosan, Bulosan's work was also able to inform students' reading of the complex ideas in Benjamin.

### **Aparicio Carranza, PhD**

Associate Professor

Computer Engineering Technology



## **Wireless Network Penetration Testing Using Kali Linux on BeagleBone Black**

### **Abstract**

The development of powerful, low cost mobile compute platforms has enabled a host of new penetration testing applications. We investigate the Kali Linux operating system and its embedded security tools, hosted on the BeagleBone Black (BBB) hardware platform. This combination creates a powerful, portable ethical hacking tool. Specific tools offered by Kali Linux such as Ettercap Graphical, Wireshark, Aircrack-ng, and ARP poison are used to perform in-depth, practical penetration testing. Experimental results include a demonstration of how Kali Linux on the BBB can be used to perpetuate a denial of service attack by de-authenticating wireless access from another host. Further, we demonstrate the collection of valuable data including user IDs, usernames, and passwords obtained from a reconnaissance attack.

**Marco Castillo, PhD**

Associate Professor

Social Science

## **Do As I Say, Not As I Do? US Economic Policy and Dollarization in Ecuador**

### **Abstract**

In this paper I review the state of Ecuadorean economic policy in the 21st century, emphasizing the impact of and national reaction to liberal economic policy in the nation, especially dollarization. While economic liberalism and dollarization had a positive effect on Ecuador's economy, these policies have faced a backlash from voters resulting in reversion to greater governmental intervention in the economy that liberal critics argue is unsustainable in the long term. Advocates for economic liberalism will need to adopt more incrementalist approaches toward policy reform, remain cognizant of the centrality of Ecuador's human development aspirations, and recognize the reality of policy diffusion processes to succeed in future policy changing efforts.

**Sandra Cheng, PhD**

Associate Professor

Humanities

## **Word and Image in Italian Caricature**

### **Abstract**

Caricature developed as a studio practice in the Carracci Academy of the late-Cinquecento, and at the hands of talented draftsmen flourished as a genre over the next century. Some of its visual characteristics were informed by humorous prints, notably Jacques Callot's *gobbi* imagery. Nevertheless, few early prints of caricatures exist. In general, caricatural prints were not

produced until the latter half of the Seicento. This talk examines the connection between early caricature and prints, and explores the changing definitions of caricature that finally stimulated its production and dissemination via the print medium.

**Jean F. Claude, CHE, CCE**

Associate Professor

Hospitality Management

**Abstract**

**The Impacts of Environment Degradation on Food Security**

Research points to many cases where food security is clearly threatened by environmental degradation. The productivity of some lands has declined due to soil erosion and deforestation. Each year farmers experience significant crop losses as a result of drought, crops disease and pest infestation. If increase in food production in Haiti is to be met only by indiscriminate expansion of cropland area, intensification of yields using artificial fertilizers and pesticides and by increasing harvest beyond sustainable levels, we may further erode the platform upon which food production is based.

**Kenneth Conzelmann, AIA, ARA**

Assistant Professor

Architectural Technology

**Society of American Registered Architects (SARA)**

**Abstract**

“Architect helping Architect” is SARA’s motto. Founded in 1956, SARA believes that architects, working together through a vital professional society, will advance the individual and the profession, and increase contributions to our communities. I joined SARA in 2009 and was swiftly seated as a Director with the SARA/NY Council. And as a member since 1996 of the time-honored AIA, I found SARA to be quite the fledgling, still forming yet ready to bloom.

**Urmi Ghosh-Dastidar**

Professor

Mathematics

**Abstract:**

In this work an example of portfolio optimization via simulated annealing method will be discussed. Simulated annealing (SA) method is essentially a hill climbing method; however, it also allows moving downhill with some probability. An appropriate cooling schedule is required for finding an optimal solution efficiently and accurately. A slow cooling schedule makes the

search inefficient whereas, if the schedule is too fast, the optimal solution may not be founded. In this work we will find an optimal strategy to invest the money into several assets for a specified targeted return with some pre-determined allowable risk. We will show that with all ten initial conditions the method SA finds the optimal strategy significantly faster than the exhaustive search techniques. An introduction to rotated coordinate axes will also be provided. Rotation of coordinate axes exploits the correlation between different parameters and thus, makes the search process more efficient.

**Susan Davide, RDH, MS, MEd**

Assistant Professor

Dental Hygiene

### **Organization for Sterilization, Asepsis and Prevention (OSAP)**

#### **Abstract**

The 2017 OSAP Annual Conference is the premier infection control and patient safety education and networking event in dentistry. As a new member to this organization, attending this conference allowed me to experience the latest updates on evolving guidance and emerging infection prevention and safety issues. As Pre-clinic Coordinator of DEN1100, infection control (IC) and asepsis are two important topics taught in this introductory course and one that continuously changes.

As a first-time attendee, I volunteered and assisted by introducing two facilitators for an Educators Forum and welcomed this opportunity. I attended the membership meeting to get an understanding of the background/history of the organization, support it receives from various companies, and the financial status. Networking was present throughout all the courses, especially at the Educators Forum.

**Rebecca Devers**

Assistant Professor

English

#### **Abstract**

#### **“Ali as Teacher: Bringing the Champ into a Composition Classroom”**

I designed a first-year composition class organized around Ali’s life. The syllabus included units on heroism, the experiences of Muslims in America, and the civil rights movement, with readings from – among other sources – Ali’s autobiography, the film *When We Were Kings*, and the 1978 comic *Superman vs. Muhammad Ali*. The signature research project asked students to generate a lesson plan that used an element of Ali’s life to teach a concept in another class (e.g., how can a boxing match teach anatomy or the physics of throwing a punch? What can a law student learn from Ali’s reversed conviction for draft evasion?). At the symposium, I presented a paper that drew on the experiences and assessment of this class (which I taught in Fall 2016) to

help comprehend Ali's significance today, as well as the potentials of using his life and legacy as a teachable moment.

**Javiela Evangelista,**  
**PhD Assistant Professor**  
*Anthropology*  
*Social Science*

**Fragmented Publics: Identity, Time, and Spatial Locations of Mothers Left Behind**

*American Anthropology Association Conference 2009*

*The End/s of Anthropology*

**ABSTRACT**

As our globalized world creates elastic boundaries, as familial bonds extend across continents, Anthropology can become a liminal threshold to create textured understandings of space and time as they connect to power, memory and identity. In 1993 I began going to Hungary forming connections with people defying fragmented boundaries. I befriended a group of Hungarian immigrants in Los Angeles. Some staying illegally with long expired tourists visas feared that going home to Hungary would prevent their return to America. With each trip I made back to Hungary they would fill my suitcases with seemingly simple gifts of "American" chocolate, coffee, and handwritten notes for their parents--in most cases this meant widowed senior women.

As Hungarian hospitality is key, a quick stop to drop off gifts was not possible-- I had to sit, eat, and talk with these elderly women who often lived alone. I began to realize that these gifts were not simply forms of reciprocity between my US research group and me, but rather that I had become a human conduit that stretched a human bond between emigrant child and mother. On my return to the US, Hungarian mothers would ask me to bring gifts for their children-- "Hungarian" chocolate, simple foods not found in the US, a Hungarian crossword magazine. This paper explores textured meanings of time and space as we engage in fieldwork communities that live in new forms of social and economic interactions. How does one understand the experience of senior women left behind in terms of gender, memory and identity?

**Elena Filatova, PhD**  
 Assistant Professor  
 Computer Systems Technology

**Sarcasm Detection Using Sentiment Flow Shifts**

**ABSTRACT:**

One of the most frequently cited sarcasm realizations is the use of positive sentiment within negative context. We propose a novel approach towards modeling a sentiment context of a document via the sequence of sentiment labels assigned to its sentences. We demonstrate that the sentiment flow shifts (from negative to positive and from positive to negative) can be used as reliable classification features for the task of sarcasm detection. Our classifier achieves the *F1*-measure of 0.7 for all reviews, going up to 0.9 for the reviews with high star ratings (positive

reviews), which are the reviews that are materially affected by the presence of sarcasm in the text.

### **Kylie Garcelon**

Assistant Professor

Hospitality Management

### **Hospitality education as a facilitator or paradigm to the reversal of disparate environmental and food security issues**

#### **ABSTRACT:**

Hospitality professionals, particularly those working in the food and beverage sectors are, making decisions daily on food procurement and production. In lieu of this intimacy, there are real and potentially significant ways that Hospitality Education, when implementing global education pedagogies, can act as a catalyst for future generational shifts toward improved ecosystems and food stability.

### **Li Geng, PhD**

Assistant Professor

Electrical & Telecommunication

Engineering Technology

### **Soft Biometrics in Online Social Networks: A Case Study on Twitter User Gender Recognition**

#### **ABSTRACT**

The proliferate unstructured data generated in online social networks leads to significant research advances in the recognition of user profiles (e.g., age, gender, ethnicity, etc.), but meanwhile brings new challenges. These attributes are referred to as soft biometrics and provide a semantic description of users. Identifying users' soft biometric traits in online social networks is crucial for a variety of applications such as customized marketing, personalized recommendation, and urban planning. Compared to conventional studies, we address the importance and challenges of identifying soft biometrics in online social networks and provide a case study on gender recognition of Twitter users based on their tweets texts and profile images. We first apply an efficient approach to label the soft biometric attributes of users using their self-reported names, instead of labor-forced methodology such as manually labeling and crowdsourcing. Then we investigate the approaches using texts and profile images, respectively, including Hashtag-based TF-IDF, LDA Topic Distribution, SIFT-based TF-IDF and Convolutional Neural Networks (CNN). Finally, we propose an ensemble method by combining models learned from both texts and images to enhance gender identification. The performance in our extensive experiments is demonstrated to be comparative with state-of-the-art work.

**Laura Ghezzi, Ph.D.**

Associate Professor  
Mathematics

**Invariants of Cohen-Macaulay rings associated to their canonical ideals****ABSTRACT**

Commutative Algebra is the branch of pure mathematics that studies commutative rings. The term “ring” was introduced by Hilbert.

The purpose of this work (joint with Shiro Goto, Jooyoun Hong and Wolmer Vasconcelos) is to introduce new invariants of Cohen-Macaulay local rings. Our focus is the class of Cohen-Macaulay local rings that admit a canonical ideal. Attached to each such ring  $R$  with a canonical ideal  $C$ , there are integers-the type of  $R$ , the reduction number of  $C$ -that provide valuable metrics to express the deviation of  $R$  from being a Gorenstein ring. We enlarge this list with other integers-the roots of  $R$  and several canonical degrees. In this talk we define and focus on the (basic) canonical degree.

**George Guida**

Professor  
English Department

**ABSTRACT:**

Italian American fiction writers write fiction, and sometimes they write Italian American fiction. Sometimes they make a conscious choice to write this particular subgenre, and sometimes they have no choice. This panel will address the consciousness, preoccupations, choices, and calculations that go into writing Italian American fiction. Among other questions, the panel will address these: What distinguishes Italian American fiction? What is an Italian American narrative consciousness? Who are Italian American characters? Are there such things as Italian American structures and styles? For the writer and for the potential audiences, what are the relative benefits and detriments of Italian American fiction writing and reading, as opposed to, simply, fiction writing and reading?

Panelists will read briefly from their own fiction and then join in a roundtable discussion to address the specific questions above as well as other questions that emerge. Panelists will include Marisa Labozzetta, John Domini, Fred Misurella, and George Guida. Joanna Clapps Herman will chair. Each panelist is a seasoned writer of fiction, and each has published a considerable body of Italian American fiction.

**Caroline Hellman**

Professor  
English

## **Black Boys and White Whales: Ta-Nehisi Coates' Conversation with Herman Melville**

### **ABSTRACT:**

In a May 2011 article for *The Atlantic*, Ta-Nehisi Coates wrote that the opening lines of *Moby-Dick* constitute “the greatest paragraph in any work of fiction, at any point, in all of history.” Coates has taken note of Melville’s interrogation of predator and prey in the novel, observing that the white whale’s refusal to occupy the singular role of the hunted results in the consternation of the hunters. It would be easy to relate Coates’ interest in this dynamic to 21<sup>st</sup>-century race relations, but the author’s observations about the text defy any facile narrative. He understands both the anxiety of the whale and the perturbation of the *Pequod* crew.

**David Sánchez Jiménez, PhD**

Assistant Professor  
Humanities

## **La interculturalidad retórica en la elección de las funciones de las citas**

### **ABSTRACT:**

This research derives from the interest in learning the cultural differences in citation practices of native Spanish (Ee) and American writers of English (Ai) in the academic genre of Master’s thesis from a discursive and rhetorical perspective. Many linguists have highlighted the importance of citations within the academic writing over the past few decades (Swales, 1986, 1990; Thompson y Ye, 1991; Hyland, 1999; Thompson, 2005; Bazerman, 2003; Vázquez, 2004; Arnoux et al, 2005; Cassany, 2005; Charles, 2006a, 2006b; Pecorari, 2006; Parodi, 2007; Petrić, 2007; Harwood, 2009; Schembri, 2009; Harwood y Petrić, 2012). Citation is important for the writer, not only to share his knowledge on a specific topic of his discipline to the scientific community, but also to give his point of view on the sources consulted (Ivanič, 1998; Ivanič y Camps, 2001; Bazerman, 2003; Thompson, 2005; Charles, 2006; Hyland, 2005, 2011; Castelló et alii, 2011; Gil-Salom y Soler-Monreal, 2014). This suggests that the selection of citations provides an estimate of the most relevant works documented by the researcher in a specific field of study, while contributing to integrate the work itself within the gnoseological field.

**Deleram Kahrobaei**

Professor  
Mathematics

## **Fragmented Publics: Identity, Time, and Spatial Locations of Mothers Left Behind**

### **ABSTRACT:**

Last year the NSA (National Security Agency) announced its plans for transitioning to cryptography that is resistant to a quantum computer. Shortly after, NIST (National Institute of

Standards and Technology) announced a worldwide competition for quantum-resistant public-key algorithms. Group-based cryptography has been an active area for over a decade, and it has some promises to be one of the solutions for this call. In this talk, I will explore some of the proposed cryptographic schemes and raise some open problems

**Daeho Kang**

Assistant Professor

Environmental Technology

**ABSTRACT:**

One of the effective ways to utilize geothermal energy in a central heating and cooling system for large-scale buildings is to make use of a central ground-source heat pump system (CGSHP) that consists of a series of chiller-heaters based on an irreversible vapor-compression cycle and a dedicated valve control system. The CGSHP system mixes fluids from the evaporator side and condenser side of the individual chiller-heaters. The mixed fluid flowing through either evaporator side or condenser side can be connected to the ground source water loop. These special features enable the central system to operate in a number of modes, providing simultaneous cooling and heating. This paper focuses on modeling this unique system in a whole building energy simulation program, EnergyPlus. It discusses approaches to address challenges in implementing the proposed model into the existing EnergyPlus program. It demonstrates input requirements to adequately model the performance of individual chiller-heaters and the central system. The simulation results from a case study are presented in this paper to evaluate the feasibility of the proposed model.

**Nadia S. Kennedy**

Assistant Professor

Mathematics

**“Opening a Philosophical Space in the Mathematics Curriculum”**

The paper argues that philosophical inquiry may have a place in the math classroom, helping to facilitate understandings that may serve to complement and critically judge the inferences acquired in and with mathematics. In other words, philosophical inquiry may aid in the opening of a “wider horizon of interpretations” that includes a critical dimension. Such an opening represents a potential expansion of students’ mathematical experience, and promises to provide bridges for establishing richer, critical, and more meaningful connections and interactions with students’ personal experience and with the broader culture.

**Roman Kezerashvili, Ph.D**

Associate Professor

Physics Department



## The Saga of the Trineutron and Tetraneutron

Recently a candidate resonant tetraneutron state with the energy of  $0.83 \pm 0.65(\text{stat}) \pm 1.25(\text{syst})$  MeV above the threshold of four-neutron decay is found in the missing-mass spectrum obtained in the double-charge-exchange reaction  $4\text{He}(8\text{He}, 8\text{Be})$  at 186 MeV/u [1]. Earlier an international team led by physicists from the Particle Physics Laboratory of Caen, have presented in Ref. [2] experimental results suggesting the existence of a bound tetraneutron.

We review results of experimental search and theoretical studies within methods of few body physics for the lightest neutron clusters: trineutron and tetraneutron. Particularly, we discuss searches for a bound state of the trineutron that conducted in reactions:  $3\text{He}(\square\square, \square\square)3\text{n}$ ,  $3\text{H}(\square\square\square\text{p}\square)3\text{n}$ ,  $7\text{Li}(\square\square\square 4\text{He})3\text{n}$ ,  $3\text{H}(\square\square\square\square\square)3\text{n}$ , and ion collision reactions such as  $7\text{Li}(11\text{B}, 15\text{O})3\text{n}$  and  $2\text{H}(12\text{C}, 13\text{N})3\text{n}$ . We present the results of search of four bound neutrons,  $4\text{n}$ , by using the pion double charge exchange reaction  $4\text{He}(\square\square, \square\square)4\text{n}$ , heavy-ion transfer reactions such as  $7\text{Li}(11\text{B}, 14\text{O})4\text{n}$  and  $7\text{Li}(7\text{Li}, 10\text{C})4\text{n}$ , as well as observation of a tetraneutron in a fission reactions.

**Jihun Kim, PhD**

Assistant Professor

Architecture

## A Rapid Indoor Airflow Mapping With Two-Dimensional Computational Fluid Dynamics

### ABSTRACT:

Two-dimensional Computational fluid dynamics simulation (2D CFD) has been recognized as a useful tool in design and operation of buildings, quickly assessing various scenarios for their influence on airflow. The visualized airflow by 2D CFD can inform occupants with crucial information, such as removing contaminants and inducing fresh air. However, the associated uncertainties are rarely addressed, compared to its three-dimensional (3D) counterpart or physical experiments, which may lead to unrealistic representation. This paper presents a method to create indoor airflow maps for various occupant control scenarios, by adopting 2D CFD for fast convergence with complement use of 3D CFD for reducing uncertainty.

**Caner Koca, PhD**

Assistant Professor

Mathematics

## Einstein-Maxwell Metrics on Ruled Surfaces

### ABSTRACT:

In Riemannian geometry, the Einstein-Maxwell Equations, which originate from physics, can be thought of as a geometric PDE for Riemannian metrics on oriented 4-manifolds. Einstein

metrics and constant-scalar-curvature-Kähler metrics are among the (trivial) solutions of this PDE. In this talk, we will construct families of non-trivial solutions on complex higher-genus minimal ruled surfaces. These solutions are non-Kähler, but conformally Kähler. This is a joint work with Christina Tonnesen-Friedman.

### **Lufeng Leng**

Associate Professor  
Physics Department

### **Impact of Multiple-path Interference on the Performance of Coherent Transmission Systems Employing Distributed Raman Amplification (Invited)**

#### **ABSTRACT**

Distributed Raman amplification (DRA) has proven to be necessary in fiber links employing higher-order modulation formats, such as polarization division multiplexed 16/64-ary quadrature amplitude modulation (PDM-16/64QAM), due to their higher requirements on the received optical signal-to-noise ratios (OSNRs) and larger implementation penalties. However, it is well known that DRA may suffer from multiple-path interference (MPI), where a signal beats with noise composed of randomly delayed replicas of itself. The MPI noise is additional to the amplified spontaneous emission (ASE) and nonlinear interference (NLI) noise accumulated along a fiber link. To date its impact has been typically assessed for systems with very low nonlinearity, where only the ASE noise is considered dominant. However, it has recently been pointed out that the NLI accumulation is approximately one half of the ASE noise power in an uncompensated coherent transmission link, given that the launch power is optimized. Therefore, an effort of reassessing the impact of MPI on such links is necessary.

### **Xiangdong Li**

Assistant Professor  
Computer Systems Technology

### **Enhancing Information Security Education with Lab Experiments and Collaboration in a Minority Technology Institution**

**Abstract.** We present our experience on enhancing information security education with lab experiments and collaboration in a minority technical institution. We built an information security laboratory, which has supported security courses and several network courses for 10 years at New York City College of Technology (City Tech, CUNY). In addition, we have developed the collaboration with two national centers of Excellence in Information Assurance Education to enhance the student research capacity. The teaching method has been successfully implemented as a model for an experimentation environment providing hands-on experiences and research in topics related to information security.

**D. Robert MacDougall**

Assistant Professor of Philosophy  
Social Science Department

**"Kantian Arguments for Legalizing a Market in Organs"**

Annual American Philosophical Association Eastern Division Meeting, January 2017

Many authors have argued that some of the strongest reasons for legally prohibiting the sale of human body parts are found in Kant's moral philosophy. Others, rejecting such legal prohibitions, often also address Kantian arguments against such sales, implying that they agree that the success of Kant's moral arguments against organ sales is relevant to the laws governing such sales. In this paper I argue that Kant's philosophy does not support such a legal prohibition. Rather, Kant's political philosophy (as developed in the Doctrine of Right) requires the sale of human body parts to be legally permitted, despite the moral impermissibility of such sales. I argue further that the legality of such a market is necessitated by the inherent limitations of Kant's moral philosophy.

**Alberto Martinez**

Assistant Professor  
Chemistry

**ABSTRACT:**

Alzheimer's disease (AD) is the most common form of dementia affecting more than 28 million people in the world. Only symptomatic treatments are currently available. Anticipated tri-fold increase of AD incidence in the next 50 years has established the need to explore new possible treatments. The accumulation of extracellular amyloid- $\beta$  ( $A\beta$ ) plaques, intracellular tangles in the brain, and formation of reactive oxygen species (ROS) are the major hallmarks of the disease that lead to an uncontrolled neuronal death. Because of the key role that two secretases ( $\beta$ - and  $\gamma$ -) play in the production of  $A\beta$  peptides and the mounting evidence supporting the implication of some metal ions like  $Cu^{2+}$  and  $Zn^{2+}$  in the progression of AD, inhibition of secretases, specially  $\beta$ -secretase BACE 1, and metal chelation have attracted enormous interest and have become leading strategies

**Ariane Masuda, PhD**

Assistant Professor  
Mathematics

**ABSTRACT**

The workshop consisted of three minicourses and several lectures given by prominent researchers in the area of Analytic Number Theory. There was no contributed paper session. Topics included the theory of multiplicative functions, modular forms, L-functions, the circle

method, sieve methods, and exponential sums over finite fields. I volunteered to be the note taker of the workshop. The notes I took are available on the workshop website.

**Anna Matthews**

Assistant Professor  
Dental Hygiene

**Abstract:**

To provide opportunities for continuing education in educational methodology at the New York City College of Technology's dental hygiene (DH) program, we began a series of annual workshops focusing on research-based educational approaches towards improving student learning and increasing faculty calibration. This study aimed to evaluate the change in faculty written feedback practices following the workshop that introduced strategies to improve communication and feedback in clinical DH courses.

**Benito Mendoza**

Assistant Professor  
Computer Engineering Technology

**ABSTRACT**

This paper describes a pedagogical model that integrates Course-based Undergraduate Research Experiences (CUREs) in an engineering technology course. The model aims to create experiences intended to enculturate students into developing basic practices for scientific investigation. And, at the same time, it seeks to provide opportunities to develop practical workforce skills for the computer technology field. Here we present the results from a pilot implementation. The effectiveness of the model has been evaluated by an external certification exam that validates foundational skills and knowledge required on entry-level job positions in the Information Technology field. The mean passing rate and mean exam's score of our students overpassed those of students from New York State and the country. We believe that this is a practical course model can be easily replicated by programs with the same interest.

**Diana Mincyte, PhD**

Assistant Professor  
Social Science

**The Drone in the Garden: Labor and Power in Precision Agriculture**

**ABSTRACT**

While there is a burgeoning literature on social, economic, and political aspects of the use of digital technologies in workplaces, little has been done to examine the labor dimension of the implementation of robotic technologies in agriculture. Indeed, the promoters of the use of robotic technologies (such as AVUSI) regularly point to agriculture as the largest and most promising

sector for the implementation of a new generation of labor saving digital devices. Relying on preliminary field research, expert reports, media accounts, and relevant scholarly literature, this paper examines the redistribution of work and power in digitally equipped farms and rural landscapes, more broadly. The analysis presented in this paper juxtaposes the accumulation of financial, cultural and social forms of capital through the use of digital technologies and the emerging forms of dispossession embodied in contemporary rural conflicts over labor, particularly racialized migrant labor, land-use, knowledge, and property rights. It shows how new digital and robotic infrastructures operate as a social mechanism for reinventing power relations in rural areas. This study contributes to the debates in agrarian studies by bringing in closer conversation the scholarship on digital labor and the classical analyses of the social and justice dimensions of agricultural work.

**Grazyna Niezgoda**

Lecturer

Mathematics

## **ABSTRACT**

Teaching remedial math can be challenging or frustrating. Majority of remedial math students lack of math study skills and poor self – efficacy judgment. The presenter will share ideas and strategies that are used to help students to develop and evaluate effective study techniques, increase their self-efficacy judgment and finally become more successful learners.

**Unurjargal Nyambuu**

Assistant Professor

Social Science

## **Self-Serving Altruism: Globalization and Gating**

## **ABSTRACT**

Globalization has fueled a growth in consumption and contributed to greater interdependence between nations, to greater business, economic and industrial specialization, to development and to a growth of competing and collaborating global supply chains and firms. At the same time, Sovereign States have become more gated, increasing international inequalities. Self-serving altruistic domestic consumption arises when foreign consumption contributes to the domestic utility of consumption. Consumption saturated economies with excess capacities vie to increase their employment and expand their foreign trade to maintain their competitive advantage. Then the traditional presumption that consumption preferences are “selfish” may be misleading. When the self-serving altruism is combined with economic reciprocity, globalization is a “win-win” economic development. Such situations have both consumption and price implications, depending on countries’ preferences, cost structures and trades. This paper is based on a Cournot model for two countries, each with a utility function of both countries’ consumption. We use a Nash conjecture to determine countries’ inverse demand functions. Optimal global supply is shown to lead to prices that are linearly related and a

function of the countries preferences. We show the circumstances where purchasing power parity (PPP) exists.

**Linda Paradiso MSN, RN, NEA-BC**

Assistant Professor

Department of Nursing

**ABSTRACT:**

The American Psychiatric Nurses Association (APNA) is one of the largest professional organizations for nurses specializing in providing psychiatric nursing care, prevention of mental health problems, and wellness promotion. Their well-established program provides the latest developments in mental health research and practice to the Psychiatric Mental Health nursing community. Their annual conference is accredited by the American Nurses Credentialing Center's Commission on Accreditation. It features three days of continuing education specific to psychiatric-mental health nursing, and is a perfect resource for identifying evidence based changes in practice and education.

**A. Lavelle Porter**

Assistant Professor

English

**W. E. B. Du Bois, *The Black Flame*, and the Art of the Novel.**

**ABSTRACT:**

The three novels that comprise *The Black Flame*, including *The Ordeal of Mansart* (1957), *Mansart Builds a School*, (1959), and *Worlds of Color* (1961), were completed by W.E.B. Du Bois in his last years, and they represent the culmination of a ninety-five year life of scholarship and activism. The trilogy is organized around the life of a black educator named Manuel Mansart, and covers the black freedom struggle in America (through an international context) from 1876 to 1954. In this project I am reading *The Black Flame* as a combination of two specific genres, the historical novel and the academic novel. Though some critics have regarded Du Bois as a failed novelist, I argue that these novels can be productively read as conscious formal experiments in which Du Bois used the malleability of the novel as a form in order to incorporate various rhetorical modes of writing, including history, sociology, and literary criticism. I am analyzing Du Bois's novels through his own theories of black cultural production in works such as "Criteria of Negro Art," as well as applying Bakhtinian theory of the novel in order to understand *The Black Flame* as a formal literary experiment that allowed Du Bois to incorporate a range of materials and ideas into an epic narrative centered on black higher education as a mode of resistance against white supremacy.

**Ashwin Satyanarayana, PhD**

Assistant Professor  
Computer Systems Technology

**ASEE Spring 2017 Mid Atlantic Section Conference, April 8-9, 2017, Morgan State University.**

After serving as Secretary/Treasurer of ASEE Mid Atlantic Section from 2014-2017, I was elected as **Vice Chair** for the section at this conference. As part of the **Executive Board** of ASEE Mid Atlantic, I attend the board meeting, and helped organize the conference. At the meeting, I presented the financial statements for the year 2016-2017, took meeting minutes, and was involved in several pedagogical discussions at the conference.

**Hans Schoutens**

Professor  
Mathematics

**Extended dimensions and the spectrum of ultra products of Noetherian local rings.**

I will discuss a few extended dimensions, meaning that on the class of Noetherian local rings, they all give Krull dimension, but without the Noetherian assumption they may differ. I will apply this in particular to ultraproducts of Noetherian local rings, in which case these dimensions can often be calculated.

**Maura A. Smale**

Chief Librarian, Professor  
Library

**A Day in the Life: Practical Strategies for Understanding Student-Space-use Practices**

**ABSTRACT**

Research on students' educational experiences demonstrates the importance of a holistic understanding of the complexity of students' lives to developing university programs, services, and resources that effectively address students' needs. While investigating the local expression of student "taskscape" -- the ensembles of interrelated social activities that take place across space and time -- at a single university provides critical information about students' lived experience, few studies have sought to conduct cross-institutional comparison and analysis.

The "A Day in the Life" study was therefore designed to build an ethnological argument about the experience of higher education in the United States through a multi-sited ethnography of students at seven different institutions of higher education. These universities were chosen to represent not only a cross-section of different types of higher education institutions but also the diversity of the US student body.

**Shelley E Smith PhD AIA**

Assistant Professor

Architecture Technology

**Stewardship and Preservation in the Layered Landscape: Lessons from Bedford, New York**

The Town of Bedford, New York, a 39-square-mile municipality 40 miles north of New York City, provides a richly instructive case study in the management of a cultural landscape.

Beginning with the first European settlement in the 1640s, Bedford has retained considerable historic fabric layered throughout its buildings and landscapes—early agrarian farmsteads and a village green, a post-Revolution rebuilding, the coming of the railroad and displacement of an entire village by the City reservoir system in the nineteenth century, and waves of mansion-building in the boom years of the 1880s and the 1920s.

**Jenna Spevack**

Associate Professor

Communication Design

**Fine Arts Work Center in Provincetown****ABSTRACT:**

A one week returning residency at the Fine Arts Work Center provides the opportunity to connect with colleagues, attend lectures and presentations by internationally recognized visiting artists, writers, and poets, and for uninterrupted studio time to focus on research and creative projects. The Fine Arts Work Center provides Visual Arts and Writing Fellows individual apartments and working studios and offers the opportunity to pursue creative projects in a diverse and supportive community. The Center is situated at the tip of Cape Cod in an area of spectacular natural beauty. Additional facilities include a woodshop, print shop with etching press, gallery, and digital imaging lab.

**Claire Stewart**

Assistant Professor

Hospitality Management

**ABSTRACT:**

Throughout American history, wedding celebrations have been used as a way to define social class; a public occasion used either to reinforce the superiority of the elite, or as a vehicle for social climbers to signal a new or anticipated status. Despite the ambitious and enormous menus typical to the Victorian and Edwardian eras, the food served at these wedding celebrations was surprisingly



austere. Cookbooks, magazines and etiquette guides preached decorum and restraint. Even cookbooks insisted that wedding food should be “simple,” and etiquette experts maintained that it was “vulgar” to focus on food; a sentiment that intensified as immigrants poured in to American cities and the privileged worked overtime to hold the social line separating the “old” from the “new.” Attention instead was lavished on floral decorations and seating arrangements, with particular attention given to the etiquette of guest lists and the formatting of invitations and stationery. It was the poor or the immigrant who indulged in slavish displays of food, even if achieved by potluck or guests contributing to costs.

### **Christopher Swift, Ph.D.**

Assistant Professor  
Humanities

#### **ABSTRACT:**

Katherine Biddick observed that medieval “Universal histories [the period of time between creation and the incarnation of Christ] were graphic exercises from their inception.” Mappae mundi, for instance, graphically depicted Jerusalem as a “knot that bound together genealogies and time lines and gave them coherency.” The concept of a universal history that can be mapped in dimensional terms suggests that, conversely, spatial practices have the potential to manifest temporal variability, rupture, and circularity. In this paper, I examine a group of well-known places of performance from medieval history in order to theorize the production of experiential timelessness in biblical and extra-biblical representations. Protocols of performance (doctrinally encoded and ritually redundant) blurred sequences of events and encoded future salvation with communal and historical memories, thus producing a sense of the Eternal for medieval devotees and ritual actors. On the other hand, unsanctioned practices of place had the potential to disrupt orthodox arrangement of liturgies and processions, and these performances incited their own transtemporal discourses and critiques.

### **Johann Thiel, PhD**

Assistant Professor  
Mathematics

#### **The growth of coefficients in certain PLFT $(u, v)$ -Calkin-Wilf Trees**

#### **ABSTRACT:**

A positive linear fractional transformation (PLFT) is a function of the form  $f(z) = \frac{az+b}{cz+d}$  where  $a, b, c$ , and  $d$  are nonnegative integer coefficients with determinant  $ad - bc \neq 0$ . Nathanson defined a PLFT  $(u, v)$ -Calkin-Wilf tree, with  $u, v$  positive integers, as an infinite rooted binary tree where every vertex is labelled by a PLFT using simple set of rules. If a vertex is labelled by the PLFT  $f(z)$ , then the left child of the vertex is labelled by  $L_u(f(z))$  and the right child is labelled by  $R_v(f(z))$  where  $L_u(z) = \frac{z}{uz+1}$  and  $R_v(z) = z + v$ . In this talk we study the size

of the coefficients of PLFTs appearing in certain PLFT  $(u, v)$ -Calkin-Wilf trees. This is joint work with Sandie Han, Ariane M. Masuda, and Satyanand Singh.

### **Ryoya Terao**

Assistant Professor

Entertainment Technology

#### **ABSTRACT:**

How can we teach our students to think outside the box? How can faculty creatively guide them in a rapidly changing media environment? Today, there are more outlets than ever to distribute electronic images. Therefore, it is vital for faculty to tirelessly explore new trends, and with the help of industry experts, can mentor students to think of alternative distribution outlets and possible different career paths.

### **Junior Tidal**

Associate Professor

Library

### **Shortened Not Stirred: Managing eResources with YOURLs**

#### **ABSTRACT:**

Coordinating electronic resources URLs among different platforms is a challenge. As a solution, the Ursula C. Schwerin Library utilized the PHP-based, open-source URL shortening tool, YOURLs to keep track of the various databases that the library subscribes to. YOURLs allows the creation of custom shortened URLs. These shortened URLs are then placed within the library's Drupal-powered website and LibGuides system. If any changes to the URL occurs, only the record in YOURLs needs to be updated, optimizing the workflow of managing databases. This presentation outlines the implementation of YOURLs, how it interacts with other systems, and how it can be used for statistics.

### **Lieselle Trinidad, PhD**

Assistant Professor

Career and Technology Teachers Education

#### **ABSTRACT:**

This summer I attended the annual meeting of the American Society of Biomechanics (ASB). This is a meeting that I regularly attended as a graduate student and also published both as a poster and a podium presentation. ASB is a society that was founded by 53 scientists and clinicians back in October of 1977 in order to facilitate the exchange of people working in different fields of biomechanics applications. The Mission of ASB is to encourage and foster the

exchange of information and ideas among biomechanists working in different disciplines and fields of application, biological sciences, exercise and sport science, health science, ergonomics and human factors, and engineering and applied science, and to facilitate the development of biomechanics as a basic and applied science.

**Muhammed Ummy, PhD**

Assistant Professor  
ETET Technology

**Fragmented Publics**

**ABSTRACT:**

A simple, stable and inexpensive dual- output port widely tunable semiconductor optical amplifier-based fiber compound-ring laser structure is demonstrated. This unique nested ring cavity enables high optical power to split into different branches where amplification and wavelength selection are achieved by using low-power SOAs and a tunable filter. Furthermore, two Sagnac loop mirrors which are spliced at the two ends of the ring cavity not only serve as variable reflectors but also channel the optical energy back to the same port without using any high power combiner. More than 98% coherent beam combining efficiency of two parallel nested fiber ring resonators is achieved over the C-band tuning range of 30 nm. Optical signal to noise ratio (OSNR) of + 45 dB, and optical power fluctuation of less than  $\pm 0.02$  dB are measured over three hours at room temperature.

**Shauna Vey, Ph.D.**

Associate Professor  
Humanities Department

**ABSTRACT**

The unique orientation of City Tech's Theatre History course makes textbook selection a challenge. Standard theatre history texts privilege dramatic literature, actors, and directors. Design and technology generally receive minimal coverage. With the publication of Brockett's *Making the Scene* (2010), design and technology were finally put center stage. With use, however, the book's failings have come to light. This presentation outlines the book's strengths and weaknesses as a text for undergraduates in a stand-alone theatre history survey course, comparing it to the (out-of-print) text by Richard and Helen Leacroft. A goal of this roundtable is the solicitation of suggestions for alternate or supplementary text materials, particularly in non-Western traditions.

**Tatiana Voza, PhD**

Associate Professor  
Department of Biological Sciences

**Molecular characterization of the black coral *Telopathes cf. magna* from deep waters around New Zealand, Antarctica (Ross & Somov Seas) and Hawai'i (poster presentation)**

**ABSTRACT:**

The presentation of these two posters at the renowned International Symposium on deep-sea corals, has been one of the culminating times and results of a collaboration between 3 City Tech Biological Sciences faculty (Mercer R. Brugler, Ralph Alcendor and myself) and 6 City Tech students (Nicole Bellaflares-Mejia, Craig Dawes, Colin Joseph, Juanita Marin, Sheila Moaleman, Lysna Paul). The work we have carried has been aiming at identifying black corals collected in different parts of the world using genetic tools. The purposes of such studies are to broaden our knowledge about the distribution of black corals and elucidate their phylogeny. Such data can also support proposals to expand sanctuaries in an effort to protect critical habitats for recreationally and commercially important fish and threatened or endangered species of whales, sea turtles, and corals.

**Robert Walljasper**

Assistant Professor,  
Hospitality Management

**Worldchefs Congress & Expo**

**ABSTRACT:**

Every two years World Association of Chef Societies (WACS) organizes Worldchefs Congress to gather industry leaders from its 105 member countries. With nearly 900 attendees from 80 countries this was a very diverse group of culinary professionals. The workshops, seminars, forums and competitions featured preeminent industry authorities such as Great-Grandson of Auguste Escoffier, Hervé This, Christopher Koetke, and Mark Moriarty. These speakers enriched my viewpoint on where the culinary industry traditions originated, future direct after molecular gastronomy, setting standards in sustainability education, and the role of upcoming culinarians. As an Educator and Professional continued growth found in this conference enables me to bring contemporary trends and perspective into the classroom for students.

**Laura Westengard, PhD**

Assistant Professor  
English

**ABSTRACT:**

The “golden age” of U.S. lesbian pulp fiction took place from the mid-1940s to the mid-1960s, notably coinciding with the height of Cold War America and its foreign and domestic strategy of “containment,” a policy that worked to control the spread of communism in part by carefully regulating the domestic sphere (Alan Nadel, *Containment Culture*). Nadel explains that the “cult of domesticity” was a primary device for policing social norms around gender and sexuality and for rooting out potential subversives who supposedly threatened national security. The enforcement of a monolithic notion of the domestic involved “strictly censored television programming, the drop in average marriage age, the suburban housing development, the public elaboration of dating etiquette, and the rigidly constrictive and restrictive structure of female undergarments” (Nadel 117). The resulting highly regulated space of the proper “home”—idyllic, white, suburban, Christian, middle class, heteronormative—became an oppressive and potentially dangerous space for anyone who deviated from these norms.

### **Adam Wilson**

Assistant Professor  
Entertainment Technology

### **FactorOracle: an Extensible Max External for Investigating Applications of the Factor Oracle Automaton in Real-Time Music Improvisation**

#### **ABSTRACT:**

There are several extant software systems designed to generate music in real-time using a factor oracle automaton constructed from the musical input of a human improviser. The impetus for the design of the factorOracle external is neither a desire to supersede these systems nor introduce novel algorithms for traversing the oracle, but rather to provide a fast, canonical interface for the automaton in Cycling74’s Max and, in future iterations, the Pure Data programming environment. Technical features of the factorOracle software are introduced here.

### **Kitching Rhoda Wong, PhD**

Assistant Professor  
Human Services Department

### **Mei-banfa Sending Infants to China –**

### **Chinese Transnational Mothers Lack Agency**

Third International Conferences on Advances in Women’s Studies  
July 30-31, 2016

#### **ABSTRACT**

Globalization fortify immigration that people emigrate to other countries to seek better life. In China, *fengsu* (cultural norm) drove many young Fuzhounese to migrate to the US. Families sent their daughters overseas, considered them more reliable and willing to sacrifice for their families. These young women played dual roles of production and reproduction that their families expected. They endured the arduous work life and soon married to a person they barely know. More important, they gave birth to babies to carry the husband’s family name.

**Chen Xu**

Assistant Professor  
Computer Engineering

**ABSTRACT:**

In Fall 2015, over 30 percent of the 216 first year students who were enrolled in Electrical Circuits (EMT1150) did not pass the course, which is required for the Associate Degree in Applied Science (AAS) in Electromechanical Engineering Technology (EMT) at New York City College of Technology. The reason for the low pass rate is complex. Some students have insufficient skills in Math, while some cannot grasp the concepts of problem solving techniques, but the most fundamental problem is that students are under-prepared in learning through reading texts, even after they purchased the expensive textbook. On the other hand, instructors also struggle with teaching specialized concepts, formula, and technical terminologies because of various levels of their readability and the lack of strategies to engage students in active reading and learning.

**Gordon Xu, MLIS**

Assistant Professor  
Library

**ABSTRACT:**

As a Systems & Information Technology Librarian and Coordinator of Library Systems, my major role is providing technical support for the smooth functioning of library systems, and ensuring library systems work in an efficient, user-friendly and integrated manner. I try to acquire the knowledge necessary for the effective support of technology in the library, and I am always open and willing to expand my personal knowledgebase with the goal of improving patron and staff interactions with technology. CUNY is a major library system customer of Ex Libris.

**Ozlem Yasar**

Assistant Professor  
Mechanical Engineering

**ABSTRACT:**

In recent years, tissue engineering has been utilized as an alternative approach to organ transplantation. Success rate of tissue regeneration influenced by the biomaterials, cell sources, growth factors and scaffold fabrication. Design and precise fabrication of scaffolds are required to support cells to expand and migrate to 3D environment. Common scaffold fabrication techniques use heat, adhesives, molds or light. In this research, “inverse-photolithography”

which is a light based fabrication technique was used to generate the scaffolds. In order to control the interior architecture of the scaffold “a single vertical strut” and “a y-shape” were fabricated with the 3D printer by using the dissolvable filament. Then, the strut and the y-shape were immersed into the photo-curable solution which is poly(ethylene glycol) diacrylate (PEGDA) and photo-initiator mixture. UV light with the 365nm wavelength was placed up-side down under the solution. Photo-curable mixture was exposed to the UV light for 3 minutes to cure the entire scaffold. Solidified scaffold with the strut and y-shape inside was kept in the limonene solution. Limonene penetrated through the open ended strut and y-shape and it dissolved the 3D printed strut and y-shape away leaving the fabricated PEGDA based scaffolds. This preliminary research showcases, the 3D scaffolds with the controlled interior design, can be fabricated with the “inverse-photolithography” technique.

### **Mai Zahran**

Assistant Professor  
Biological Sciences

#### **Abstract:**

Lignin is a complex polymer found in the secondary cell walls of vascular plants and has both biological significance and potential commercial applications. In plants, lignin contributes to cell wall rigidity and structure, defense against bacterial infection and efficient water conduction. Commercially, lignin poses a significant barrier to industrial conversion of plant biomass to biofuels. This biopolymer is heterogeneous and does not have a well-defined primary structure, making it difficult to characterize with techniques that measure bulk (average) chemical composition. The relationship of the primary sequence of lignin with its structure have not been comprehensively assessed, the analysis of which could yield vital information about its functionality. Here we analyze the impact of sequence variation on the three dimensional (3-D) structure of vanilla stem lignin. Structural models of three different lignin molecules are generated. The molecules have the same average monomer and linkage composition, however their primary sequences are different. The structure and dynamics of lignin are investigated by conducting molecular dynamics simulations. Radius of gyration, solvent accessible surface areas, polymer asphericity and persistence length were calculated and compared among the three resultant sequences. Finally we compared the vanilla lignin results with those obtained for C-lignin, a recently discovered variant, to determine the existence of significant differences. This study advances our understanding of the role of diversity in the nascent sequence of lignin in its functionality in plants.

### **Andy Zhang, Ph.D**

Associate Professor  
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#### **Abstract:**

MoDAR is a custom-made low cost Mobility Detection and Auto Recognition (MoDAR) smart

device that can be used to help physically and visually impaired people to live relatively independently. It utilizes the open-source facial recognition, voice recognition software, and biosensor technology to detect people in its surroundings. This bio-mechatronics device can be a fully automated stand alone system with add on abilities such as global positioning and area mapping to deliver feedbacks to the user. MoDAR can receive commands from the user through voice commands and through a couple of control switches. In addition, the device will be equipped with safety features to warn the user of any potential hazardous situation.

**Lin Zhou**

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Mathematics Department

### **Modeling of Fluids with Transient Mesoscale Structures**

#### **ABSTRACT**

Transiently networked fluids are often studied through macroscopic modeling. To avoid the need for a closure approximation to integrate a mesoscopic model to the macroscopic level, we simulate and present results of a stochastic mesoscale model of a transiently connected system of coupled bead spring elements. This work is based on the earlier work of van den Brule and Hoogerbrugge, 1997, in which the topology of the network and its composite chains was tracked spatio-temporally. This topological tracking allows the quantification of the distribution of chain lengths and allows for the breakage and recombination of the bead-spring chains to be determined by local, as opposed to globally averaged, quantities. Several breakage/recombination energy dependences are considered including an attractive bead energy represented by a parabolic potential well. Both linear, Hookean, and nonlinear, FENE, springs are considered in the modeling and simulations. Simulation predictions in equilibrium and in transient and steady shearing are presented including mesoscale properties (chain lengths and  $Q$  distributions) and macroscale properties (shear stress, viscosity, normal stresses).