WACCI 2019 Preliminary Program

Tuesday November 12th

11:00 – Opening Words by the Workshop Chairs

11:10 – AFOSR/ONR Funding Opportunities in Chile and Southamerica

11:20 - Pablo Coelho, Universidad San Sebastian, Chile

"Fixed-pattern noise reduction via light-field imaging on infrared imaging systems: The inverse problem"

11:40 – Alejandro Silva, Universidad de la República, Uruguay

"Image Registration in Multi-Focus Fluorescence Microscopy"

12:00 - Michael Gehm, Duke Univeristy, USA

"Compressive Imaging through Scattering Media"

12:50 - Lunch Break

14:00 - Xin Yuan, Nokia Bell-Labs, USA

"Snapshot Compressive Imaging: Theory, Algorithms and Applications"

14:50 – Juan Llaguno, Universidad de la República, Uruguay

"Snapshot polarimetric imaging microscopy"

15:10 - Henry Arguello, Universidad Industrial de Santander, Colombia

"Compressive image processing and sensing"

15:40 – *Coffee Break*

16:00 – Pablo Meza, Universidad de la Frontera, Chile

"Sanpashot and multishot compressive spectral and lightfield imaging"

16:30 – Hoover Rueda, Universidad Industrial de Santander, Colombia

"Design of a Compressive Spectral Image Fusion Optical Architecture"

16:50 - Enrique Tajahuerce, Universidad Jaume I, Spain

"Computational imaging with structured light and single-pixel detection"

17:40 – Poster Reception

Wednesday November 13

9:30 – Gonzalo Arce, University of Delaware, USA

"Coded Illumination in 5D X-Ray Tomography"

10:20 – Andres Jerez, Universidad Industrial de Santander, Colombia,

"Target Detection using Coded Diffraction Patterns"

10:40 - Felipe Guzman, Pontificia Universidad Catolica de Valparaiso, Chile

"Camera array wise-sampling scheme for temporal super-resolution with Rolling Shutter"

11:00 – Coffee Break

11:20 - Samuel Pinilla, Universidad Industrial de Santander, Colombia

"Coded Aperture Design for Phase Retrieval in Optical Imaging"

11:40 – Andrés Guerrero, Universidad Industrial de Santander, Colombia

"Phase Retrieval by Deformable Mirror"

12:00 - Ryoichi Horisaki, Osaka University, Japan

"Computational imaging with randomness"

12:50 - Lunch

14:00 – Julia Alonso, Universidad de la República, Uruguay

"Multi-focus Computational Optical Imaging: macro and microscopic applications"

14:30 - Miguel Marquez, Universidad Industrial de Santader, Colombia

"Compressive spectral light field tensor imaging"

14:50 – **David Brady**, Duke University, USA,

"Smart Cameras"

15:40 – Walking Tour / Museum Visit

20:30 - Official Banquet

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9:30 - Andres Guesalaga, Pontificia Universidad Catolica, Chile

"Computational Turbulence Profilers"

10:10 – Florian Dötzer, University of Erlangen-Nürnberg, Germany

"Remote Sensing of Wind Velocities in the Thermosphere Using an Interferometric Spectrometer"

10:30 – Esteban Vera, Pontificia Universidad Catolica de Valparaiso, Chile

"Deep Learning Adaptive Optics"

11:00 – Coffee Break

11:20 – Ariel Fernández, Universidad de la República, Uruguay

"Unconventional imaging techniques for pattern recognition with the generalized Hough transform"

11:50 – **Ofelia Villareal**, Cooperativa de Tecnólogos e Ingenieros de la Industria del Petróleo y Afines, Colombia"Shotgather Recovery by 3D Curvelet Transformation"

12:00 - Sean Pang, University of Central Florida

"Signal retrieval using variational generative model"

12:50 - Lunch

14:00 - Aggelos Katsaggelos, Northwestern University, USA

"Deep Learning Superresolution"

14:50 – Amit Ashok, University of Arizona, USA

"Role of Coherence in Fundamental Limits of Imaging"

15:40 – Coffee Break

16:00 - Marcos Diaz, Universidad de Chile, Chile

"Satellite opportunities for Computational Imaging"

16:30 - Gerd Haeusler, University of Nuremberg, Germany

"Learning from Nature's Limits"

17:30 – Closing Words by the Chairs / Poster Prize

17:40 - Farewell Cocktail