

Instrumentation for Robotic Telescopes

September 3 – 7, 2012

Centro Estatal de la Artes (CEARTE)

Ensenada, B.C., Mexico

Instituto de Astronomía, Universidad Nacional Autónoma de México

Program

Sunday, September 2

16:00 – 18:00 Registration

18:00 – 20:00 Welcome reception at Corona Hotel

Conference will be held at CEARTE (Across the street from the Corona Hotel)

Monday, September 3

Session 1: Design of Robotic Telescopes & Conversion from Classic to Robotic Operation

Session Chair: TBD

08:50 – 09:00 **David Hiriart**: Welcome and Introduction

09:00 – 10:00 **Mark W. Buie** (Southwest Research Institute) (*Invited Speaker*)

10:00 – 11:00 **Luis Cuesta** “*Robotic Telescopes to Science and Public Outreach*” (*Talk*)

11:00 – 11:30 *Coffe break /Posters*

11:30 – 12:10 **Leonid Georgiev** “*RATIR’s control software and scripting*” (*Talk*)

12:10 – 12:20 *Poster: Pablo Loera* “*The Carl Sagan Solar and Stellar Observatories*”

12:20 – 12:30 *Poster: Hector Hernandez Toledo* “*A 60cm Robotic Telescope for galactic Archaeology in San Pedro Martir*”

12:30 – 14:00 *Lunch Break*

Session 2: Telescope Control & Observing Methods

Session Chair: TBD

14:00 – 14:40 **Alain Klotz** (Centre d'Etude Spatial des Rayonnements France) (*Invited Speaker*)

14:40 – 14:50 *Poster: Saul Zavala* “*Construction of a complete automatic remote control system for an astronomical observatory with auto sustainable and auto selective electrical plant*”

14:50 – 15:00 *Poster: Benito Orozco* “*Observation technique for the detection of pulsars period using an EMCCD camera*”

15:00 – 15:10 *Poster: Fernando Quiros* “*The 7-axis control for active positioning of Hydra*”

15:10 – 15:20 *Poster: Adriana Nava Vega* “*Adquisición de Interferogramas empleando el Interferómetro de Michelson*”

15:20 – 16:00 *Coffe break/Posters*

16:00 – 17:00 **Zhi-Wei Zhang** “*Overview and Current Status of the TAOS Project*” (*Talk*)

17:00 – 17:10 *Poster: Fernando Quiros* “*The Opening Automation of the 84 cm and 1.5 m telescopes domes shutter in OAN-SPM.*”

Tuesday, September 4

Session 3: Data Archiving & Mining

Session Chair: TBD

09:00 – 09:40 **Matthew Lehner** “TAOS II: A Next Generation Occultation Survey” (*Invited Speaker*)

09:40 – 10:20 **Maria Teresa Eibe** “The INTA/CAB 50-cm robotic telescope: instrumental factors conditioning photometric precision” (*Talk*)

10:20 – 10:30 *Poster*: **Daniel Ferrusca** “Automatizing a Fourier transform spectrometer to measure millimeter and far-IR wavelength radiation”

10:30 – 11:00 *Coffe break /Posters*

11:00 – 12:00 **David Hiriart** “TORO: A Robotic Telescope for Optical Polarimetry” (*Talk*)

12:00 – 12:10 *Poster*: **Benjamin Hernandez** “Preliminary results of a learning algorithm to detect stellar occultations”

12:10 –14:00 *Lunch Break*

Session 4: Real time analysis and Adaptive Optics

Session Chair: TBD

14:00 –15:00 **Shriharsh Tendulkar** (California Institute of Technology) (*Invited Speaker*)

15:00 – 15:10 *Poster*: **Rosalia Langarica** “An automated system for the sensitivity characterization of Hamamatsu R5912 type photomultipliers”

15:10 – 15:20 *Poster*: **Silvio Tinoco** “Design proposal for an underwater, automated system for the sensitivity characterization of 10”- Hamamatsu R7081 photomultipliers”

15:20 –16:00 *Coffe break/Posters*

16:00 –16:10 *Poster*: **Juan Manuel Núñez** “Installation of a Seeing Monitor with Robotic Telescope at the San

Pedro Martir Observatory” (Talk)

16:10 – 16:20 *Poster*: **Salvador Zazueta** “Controllers for CCDs”

16:20—16:30 *Poster*: **Francisco Murillo** “Automation of the Boller & Chivens spectrograph lighting system”

16:30 –16:40 *Poster*: **Joel Herrera** “Corrective maintenance of the SOPHIA instrument of the OAN at SPM Baja California”

16:40 *Group Photo*

Wednesday, September 5

Session 5: Space Telescopes

Session Chair: TBD

09:00 – 10:00 **Jaymie Matthews** (University of British Columbia) *(Invited Speaker)*

10:00 – 11:00 **Angel Colin** *"Design of LWIR bolometric detection structure" (Talk)*

11:10 – 11:20 Poster: **Jorge Rodrigo Ortega Solis** *"Broad-band amplifier applied to imaging systems"*

11:20–11:30 Poster: **Benito Orozco** *"Progress on the installation of the 5 meter radio telescope in the Sierra Negra volcano"*

11:30 Excursions: Leaving to SPM and San Antonio de las Minas

Thursday, September 6

13:30 Return from SPM

Session 6: Global Networking

Session Chair: TBD

16:00 – 16:40 **Martin Jelínek** (Instituto de Astrofísica de Andalucía, Spain) *(Invited Speaker)*

16:40–17:20 **Evgeniy Gorbovskoy** *"Global MASTER robotic net" (Talk)*

17:20 – 17:30 Poster: **Gerardo Sierra** *"Mechanical System Upgrade of the 62-cm telescope mount at Severo Diaz Observatory"*

17:30 – 17:40 Poster: **Eduardo de la Fuente** *"Control system of the 62-cm telescope at the Severo Diaz Observatory for its automation"*

17:40 – 17:50 Poster: **Urania Ceseña** *"Remote alert system for the computer network at San Pedro Martir Observatory"*

20:00 Conference dinner

Friday, September 7

Session 9: Projects for the Future

Session Chair: TBD

09:00 – 9:40 **Jean-Luc Atteia** (IRAP/OMP, France) *(Invited speaker)*

9:40 – 10:20 **William Lee** *"The RATIR instrument for the Harold Johnson 2.5m Telescope at OAN-SPM" (Talk)*

10:20 – 10:30 Poster: **Michael Richer** *"Automation of the OAN/SPM 1.5-meter Johnson Telescope for Operations with RATIR"*

10:30 – 11:00 *Coffe break /Posters*

Session 10: Panel Discussion

Session Chair: TBD

11:00 – 12:30: Future Robotic Projects for SPM.

William Lee (SASIR)

Matthew Lehener (TAOS)

Jean Luc Atteia (SVOM)

Martin Jelínek (BOOTES)

12:30 **David Hiriart** Farewell