



## Habitable planets, M dwarfs and NIR spectrographs (Part I)

SatMeet4: Monday, July 13, 2015 (14:00-16:30)  
Lecture room 205

### Program

Hour	Title	Contributor
14:00-14:10	Welcome and introduction to joint satellite meeting “Validation and compilation of Kepler habitable zone candidates” and “Habitable planets, M dwarfs and NIR spectrographs”	Nader Haghighipour
14:10-15:40	<b>Validation and compilation of Kepler habitable zone candidates (SatMeet5)</b>	
15:40-15:55	<i>Tidal locking around M dwarfs</i>	Eric T. Wolf (U. Colorado, USA)
15:55-16:10	<i>3D general circulation models to determine habitable zones around M dwarfs</i>	Jérémy Leconte (CITA/CPS, Canada)
16:10-16:30	Open discussion: <i>Kepler Habitable Zone Working Group and <math>\eta</math>-Earth</i>	Moderators: Nader Haghighipour, Stephen R. Kane, Ravi K. Kopparapu (convenors of SatMeet5)

Convenors of Part I:

- Ravi R. Kopparapu (PennState, USA)
- José A. Caballero (CAB, Madrid, Spain)



# Habitable planets, M dwarfs and NIR spectrographs

13-15 July 2015 • Bern, Switzerland

Pathways towards habitable planets

Triple satellite meeting

## Habitable planets, M dwarfs and NIR spectrographs (Part II)

SatMeet4: Tuesday, July 14, 2015 (14:00-16:30)

Lecture room 205

### Program

Hour	Title	Contributor
14:00-14:10	Welcome and introduction to satellite meeting, Part II	José A. Caballero
14:10-14:25	<i>Stellar activity of M dwarfs with planets</i>	Jorge Sanz-Forcada (CAB, Spain)
14:25-14:40	<i>Atmospheric chemistry of planets around M dwarfs</i>	Peter Gao (Caltech, USA)
14:40-14:55	<i>False positive biosignatures on habitable planets around M dwarfs</i>	Sonny Harman (PennState, USA)
14:55-15:10	<i>Habitable planets around M dwarfs: from Kepler to TESS, PLATO, JWST and beyond</i>	Ravi K. Kopparapu (PennState, USA)
15:10-15:25	<i>HPF: Habitable Planet Finder (HET)</i>	Suvrath Mahadevan (PennState, USA)
15:25-15:40	<i>SPIRou: SpectroPolarimètre InfraRouge (CFHT)</i>	Isabelle Boisse (LAM/Pythéas/AMU, France)
15:40-15:55	<i>IRD: InfraRed Doppler instrument (Subaru)</i>	Takayuki Kotani (NAOJ, Japan)
15:55-16:10	<i>CARMENES: Calar Alto high-Resolution search for M dwarfs with Exoearths with Near-infrared and optical Échelle Spectrographs (3.5m CAHA)</i>	Andreas Quirrenbach (LSW/ZAH, Germany)
16:10-16:30	Open discussion: <i>Habitable planets around M dwarfs and NIR spectrographs: synergies and future</i>	Moderator: José A. Caballero

### Convenors of Part II:

- José A. Caballero (CAB, Madrid, Spain)
- Ravi R. Kopparapu (PennState, USA)
- Suvrath Mahadevan (PennState, USA)



## Habitable planets, M dwarfs and NIR spectrographs (Part III)

SatMeet4: Wednesday, July 15, 2015 (14:00-16:30)  
Lecture room 205

### Program

Hour	Title	Contributor
14:00-14:05	Welcome and introduction to satellite meeting, Part III	José A. Caballero
14:05-14:20	<i>Giano: a bifront infrared spectrometer highly optimized for both low and high spectral resolution (TNG)</i>	Riccardo Claudi (INAF Padova, Italy)
14:20-14:35	<i>NAHUAL: a high-resolution echelle spectrograph for large telescopes (10.4 m GTC)</i>	Carlos del Burgo (INAOE, Mexico)
14:35-14:50	<i>TARdYS: Tao Aiuc high Resolution (d) Y-band Spectrograph (6.5 m TAO)</i>	Leonardo Vanzi (Pontificia UC, Chile)
14:50-15:10	<i>CSHELL (IRTF), iSHELL: immersion-grating high-resolution echelle spectrograph (IRTF) and MINERVA-Red: NIR single-mode spectrometer (0.7 m Mt. Hopkins)</i>	Peter Plavchan (Missouri State, USA)
15:10-15:25	<i>HIRES: High Resolution Spectrograph (E-ELT)</i>	Livia Origlia (INAF Bologna, Italy)
15:25-15:40	<i>NIR bulk spectrographs</i>	Christian Schwab (Macquarie U, Australia)
15:40-15:55	<i>NIR laser combs</i>	Scott Diddams (NIST, USA)
15:55-16:10	<i>NIR Fabry-Pérot etalons</i>	Samuel Halverson (PennState, USA)
16:10-16:30	Open discussion: <i>Technology for NIR spectrographs: status, problems and solutions, synergies and future</i>	Moderator: Suvrath Mahadevan

Convenors of Part III:

- **Suvrath Mahadevan** (PennState, USA)
- **José A. Caballero** (CAB, Madrid, Spain)