

## Conference Schedule

\* Invited Talk (**bold**): 40min (talk 30min + Q&A 10min).

\* Joint Talk (marked "(J)"): 25min (talk 20min for two + Q&A 5min).

\* Contributed Talk: 15min (talk 12min + Q&A 3min).

### **Monday (October 21)**

Time	Name	Title
9:00		<i>Registration</i>
10:00		Opening
<b>Exoplanet (Planet Population)</b>		
10:10	<b>B. A. Biller</b>	<b>Exoplanet Direct Imaging Surveys: the statistical picture</b>
10:50	E. L. Nielsen	The Gemini Planet Imager Exoplanet Survey: Giant Planet and Brown Dwarf Demographics from 10-100 AU
11:05	<b>M. Ogiwara</b>	<b>Development of planet formation theory by comparison with observational data</b>
11:45		Poster Pops
12:00		<i>Lunch</i>
<b>Instrument and Technology (Ground+)</b>		
13:30	<b>D. Mawet</b>	<b>High contrast imaging and spectroscopy of exoplanets deconstructed</b>
14:10	N. Jovanovic	First Light Results from the Keck Planet Imager and Characterizer
14:25	J. Pezzato	Status of the Phase II design and development of the Keck Planet Imager and Characterizer
14:40	A. Vigan	Bringing high-spectral resolution to VLT/SPHERE with a coupling to VLT/CRIFES+: status of the HiRISE project
14:55		<i>Coffee break &amp; Poster viewing</i>
15:40	M. Langlois	Status of the SPHERE/SHINE survey: From the observations to the exoplanet detection performances.
15:55	J. Lozi	SCEXAO: Current status and upgrades
16:10	T. Kotani	Development of the Extremely High-Contrast, High Spectral Resolution Spectrometer REACH for the Subaru Telescope
16:25	K. L. Miller	Spatial Linear Dark Field Control on SCEXAO
16:40	B. Mazin	Results from Microwave Kinetic Inductance Detectors for Exoplanet Direct Imaging
16:55	N. H. Fruitwala	Active Speckle Control with Microwave Kinetic Inductance Detectors
17:10	B. L. Gerard	Speckle Subtraction: Limitations and the Path Forward
17:25	C. Marois	Imaging and Characterization of Rocky Earth-size Habitable Zone Planets in the Solar Neighborhood with TMT
17:40		Poster Pops
18:15		<b>Welcome Reception</b>

**Tuesday (October 22)**

Time	Name	Title
9:00	<i>Announcement</i>	
<b>Disk Theory</b>		
9:10	R. Tazaki	Effect of dust size and structure on scattered-light images of protoplanetary disks
9:25	M. Montesinos	Radiative scale-height and shadows in protoplanetary disks
9:40	<b>R. Dong</b>	<b>Observing planet formation in protoplanetary disks</b>
10:20	<i>Coffee break &amp; Poster viewing</i>	
<b>Disk Imaging</b>		
11:00	<b>L. Perez</b>	<b>Small-scale Substructures in Planet-forming Disks</b>
11:40	M. Konishi	Dust Filtration in T Tauri Star HP Cha
11:55	A. Bayo	The illusive disk around TWA 7
12:10	<i>Lunch</i>	
13:30	<b>C. Ginski</b>	<b>Optical and near-infrared scattered light imaging of protoplanetary disks</b>
14:10	<b>J. Hashimoto</b>	<b>Near-infrared high resolution observations of protoplanetary disks with Subaru</b>
14:50	Poster Pops	
15:10	<i>Coffee break &amp; Poster viewing</i>	
<b>Instrument and Technology (Polarization)</b>		
16:00	<b>F. Snik</b>	<b>A polarized view of high-contrast imaging</b>
16:40	R. van Holstein	Polarization-dependent beam shifts upon metallic reflection in diffraction-limited astronomical telescopes and instruments
16:55	<i>Short Break</i>	
<b>Combination</b>		
17:10	<b>J. Birkby</b>	<b>Revealing exoplanet atmospheres by combining high contrast imaging with high resolution spectroscopy</b>
17:50	A. Zurlo	The SPHERE view of our closest multi-planetary system: Proxima Centauri
18:05	T. D. Brandt	Masses, Orbits, and New Planets and Brown Dwarfs from Combining Imaging with Astrometry and Radial Velocity
18:20	Poster Pops	
18:30	<b>Core Time Poster viewing session (with alcoholic beverage)</b>	

**Wednesday (October 23)**

Time	Name	Title
9:00		<i>Announcement</i>
<b>Exoplanet Imaging</b>		
9:10	<b>Q. M. Konopacky</b>	<b>Characterizing Directly Imaged Exoplanets</b>
9:50	J. J. Wang	Detailed Monitoring of the HR 8799 Planets
10:05		<i>Coffee break &amp; Poster viewing</i>
10:40	K. K. Wilcomb	Moderate Resolution Spectroscopy of Directly Imaged Exoplanets
10:55	N. Whiteford	Directly-imaged atmospheric characterisation with TauREx retrievals
11:10		Poster Pops
11:30		<i>Lunch</i>
13:00		<b>Excursion</b>
19:00		<b>Poster viewing</b>

**Thursday (October 24)**

Time	Name	Title
9:00	<i>Announcement</i>	
<b>Disk Imaging (Debris Disk)</b>		
9:10	<b>M. A. MacGregor</b>	<b>Using Debris Disks to Trace Planetary System Formation and Evolution</b>
9:50	P. Kalas	Debris disks imaged with the Gemini Planet Imager Exoplanet Survey
10:05	E. Choquet	Analysis of the population of debris disks viewed with HST
10:20	K. A. Crotts	A Deep Polarimetric Study of the Asymmetrical Debris Disk HD 106906
10:35	J. Milli	The scattering phase function of debris disks
10:50	<i>Coffee break &amp; Poster viewing</i>	
<b>Observation/Data Reduction Techniques</b>		
11:30	M. Samland	Exoplanet detection: A temporal approach for increasing contrast performance close to the inner working angle
11:45	F. Cantalloube	Beyond Gaussianity for the speckle statistics, a new consensus for post-processing of high-contrast images.
12:00	R. Laugier	Reconciling kernel-phase and coronagraphy: new steps towards combining the performance of opposing techniques.
12:15	<i>Lunch</i>	
<b>Instrument and Technology (Coronagraph)</b>		
13:30	<b>N. Murakami</b>	<b>Photonics technology toward high-contrast imaging instruments</b>
14:10	D. Doelman	Overview and on-sky results of the vector-Apodizing Phase Plate coronagraph
14:25	E. Por	The Phase-Apodized-Pupil Lyot Coronagraph (PAPLC): a simple, high-performance Lyot-style coronagraph with a small inner working angle
14:40	<i>Coffee break &amp; Poster viewing</i>	
<b>Future Plan and Facility (Ground)</b>		
15:20	J. K. Chilcote & A. Boccaletti (J)	Upgrading the Gemini planet imager: GPI 2.0 SPHERE+, Reaching New Depths
15:45	H. Kawahara	REACH: Scientific Overview of Extremely High-Contrast Spectroscopy at the Subaru Telescope
16:00	R. Jensen-Clem	Exoplanet Imaging with the Planetary Systems Imager
16:15	G. Chauvin	Planet formation and Exoplanets at the Era of the Extremely Large Telescope
<b>Exoplanet/disk Imaging &amp; Future Plan and Facility (Space)</b>		
16:30	V. Bailey	Overview of the WFIRST Coronagraph Instrument and exoplanet science
16:45	<b>J. H. Debes</b>	<b>Studying Disks at High Contrast with WFIRST/CGI</b>
17:25	<b>Poster viewing (Core time)</b>	
19:00	<b>Banquet</b>	

\* We will arrange shuttle buses from the conference place to banquet place.

**Friday (October 25)**

Time	Name	Title
9:00	<i>Announcement</i>	
<b>Exoplanet Imaging</b>		
9:10	K. B. Follette	The Bright Future of Protoplanet Direct Imaging - Lessons Learned from the First Generation Magellan Giant Accreting Protoplanet Survey (GAPlanetS)
9:25	A. J. Bohn	Young Suns Exoplanet Survey (YSES) reveals planets, brown dwarfs, and disks in Sco-Cen
9:40	T. O. B. Schmidt	A tentative first direct detection of a circumplanetary disk
9:55	M. Kasper	VISIR/NEAR, a 100-hour direct imaging search for low-mass planets in alpha Centauri
10:10	<i>Coffee break &amp; Poster viewing</i>	
11:00	<b>T. Currie</b>	<b>The Next Generation of Exoplanet Direct Imaging with Extreme Adaptive Optics</b>
11:40	J. M. Stone	Thermal-Infrared Integral Field Spectroscopy of Planets and Protoplanets
11:55	J. Leisenring	Directly Imaging Exoplanets and Disks with JWST NIRCcam
12:10	<i>Lunch</i>	
<b>Instrument and Technology (Space)</b>		
13:30	G. Ruane	The Decadal Survey Testbed: Demonstrating Technology for Imaging Earth-like Exoplanets with Future Space Telescopes
13:45	I. Luginja	Laboratory demonstration of high contrast imaging on segmented apertures: Results from STScI HiCAT testbed
14:00	P. Willems	NASA's S5 Starshade Technology Development Activity
14:15	A. Harness	Laboratory demonstration of 1e-10 contrast with a sub-scale starshade external occulter
14:30	<i>Coffee break &amp; Poster viewing</i>	
<b>Future Plan and Facility (Space)</b>		
15:15	<b>C. Beichman</b>	<b>Direct Imaging and Spectroscopy of Exoplanets with the James Webb Space Telescope</b>
15:55	<b>S. Hinkley</b>	<b>High Contrast Imaging of Exoplanets and Exoplanetary Systems with JWST</b>
16:35	L. A. Pueyo & B. Mennesson (J)	Searching and characterizing exoplanetary gems with ECLIPS, the LUVOIR coronagraph instrument High Contrast Observations with the Habitable Exoplanet - Observatory (HabEx): Science Goals and Projected Capabilities
17:00	Concluding Remarks	

## Poster Pops Schedule

\* Short talk: 1 min / poster

Date/Time	Name	Title
Monday (Oct. 21)  11:45-12:00	T. Uyama	Characterizing a directly-imaged planet Kappa And b with SCExAO
	S. Itoh	New Symmetrical Formulation of Hexagonally Segmented Telescopes
	B. Sutcliffe	A vector Apodising Phase Plate view of an exoplanet atmosphere
	R. Belikov	Theoretical Performance Limits for Coronagraphs on Obstructed and Unobstructed Apertures: How Much Can Current Designs be Improved?
	J. Kammerer	Studying giant planet formation with Fourier plane imaging techniques
	J.H. Girard	The 2019 WFIRST Exoplanet Imaging Data Challenge
	S.C. Eriksson	Near-visual integral-field spectroscopy of the circumbinary planet / brown dwarf 2M0103(AB)b with the new Narrow Field Mode on MUSE.
Monday (Oct. 21)  17:40-17:50	R. Morgan	A Standard comparison of exoplanet yield for the LUVOIR and HabEx Concept Studies.
	S. P. Bos	Focal-plane wavefront sensing with the vAPP: on-sky demonstration at SCExAO
	N. I. Godoy Barraza	New algorithms to improve the quality of NACO coronagraphic images.
	J. Zhang	New NIR Polarimetric Differential Imaging Modes on the Subaru Coronagraphic Extreme Adaptive Optics Instrument
	T. Currie	Developing and Demonstrating Linear Dark Field Control for Exo-Earth Imaging with the Ames Coronagraph Experiment Testbed
C. Mejia Prada	Deformable Mirrors Controller Architectures for High-Contrast Imaging Overview	
Tuesday (Oct.22)  14:50-15:10	T. Stolker	MIRACLES: an atmospheric characterization survey of planetary and substellar companions at 4-5 micron
	R.T. Tominaga	Formation of axisymmetric substructures via secular instabilities triggered by dust-gas friction and turbulent viscosity in protoplanetary disks
	S.Z. Takahashi	Structure of the protoplanetary disk around V1094 Sco obtained from dust continuum emission and SED
	D. Tamayo	Detecting distant, sub-Jovian planets in scattered light through their circumplanetary debris disks
	S. Mayama	ALMA reveals a misaligned, HCO <sup>+</sup> -rich, inner gas disk inside the large cavity of the transitional disk around J160421.7-213028
	G.M. Strampelli	Unveiling a population of substellar binary companions in a young cluster: HST survey of the Orion Nebula Cluster in the H <sub>2</sub> O 1.4 μm absorption band
	J. Hom	Comparison of PSF Subtraction Algorithms on Disk Imaging Data
	D.M. van Dam	High Resolution Polarisation Imaging of 1SWASP J140747.93-394542.6 The Search for an Extrasolar Ring System
	J. Gonzalez-Quiles	WFIRST Coronagraph Exoplanet Scene Simulations
	W.R. Thompson	Searching for Additional Outer Planets Around HR8799
	N. Engler	The VIBES Exoplanet Survey with SPHERE
N. Engler	SPHERE Observations of Debris Disks	
Tuesday (Oct. 22)  18:20-18:30		

Wednesday (Oct. 23)  11:10-11:30	A.Boehle	Combining high contrast imaging and radial velocities to constrain the planetary architecture of nearby stars
	T. Groff	The Parabolic Deformable Mirror Testbed at Goddard Space Flight Center
	A.J. Riggs	Results with FALCO, a Software Package for Coronagraphic Wavefront Correction
	A. Takahashi	Laboratory demonstration of a cryogenic deformable mirror for wavefront correction of space-borne infrared telescopes
	A. Vigan	On-sky validation of the ZELDA wavefront sensor for the calibration of non-common path aberrations in VLT/SPHERE
	A. Vigan	First constraints on the population of young giant exoplanets from the SPHERE infrared survey for exoplanets (SHINE)
	R. Nakatani	Radiation Hydrodynamics Simulations of Photoevaporating Protoplanetary Disks with Various Metallicities
	G. Otten	Performance simulations of the high-res characterization of directly imaged planets with HiRISE
	G. Aerna	SPHERE reveals warped disk around HD 139614

## Poster Titles

### **Exoplanet Imaging**

No.	Name	Title
P1-01	T. Uyama	Characterizing a directly-imaged planet Kappa And b with SCExAO
P1-02	J. K. Ward Duong	Gemini Planet Imager Spectroscopy of the Reddest Known Substellar Companion HD206893 B
P1-03	P. Calissendorff	Spectral characterization of newly detected young substellar binaries with SINFONI
P1-04	A. Vigan	First constraints on the population of young giant exoplanets from the SPHERE infrared survey for exoplanets (SHINE)
P1-05	N. Engler	The VIBES Exoplanet Survey with SPHERE
P1-06	M. Janson	BEAST: The B-star Exoplanet Abundance Study
P1-08	D. M. van Dam	High Resolution Polarisation Imaging of 1SWASP J140747.93-394542.6 The Search for an Extrasolar Ring System
P1-09	J. H. Girard	Imaging gap-carving, accreting protoplanets with MUSE
P1-10	S. C. Eriksson	Near-visual integral-field spectroscopy of the circumbinary planet / brown dwarf 2M0103(AB)b with the new Narrow Field Mode on MUSE.
P1-11	M. Bonnefoy	Planets and protoplanets revealed by the molecular mapping technique.
P1-12	T. Stolker	MIRACLES: an atmospheric characterization survey of planetary and substellar companions at 4-5 micron
P1-13	W. R. Thompson	Searching for Additional Outer Planets Around HR8799
P1-14	M. L. Bryan	First Constraints on the 3D Angular Momentum Architecture of a Planetary System
P1-15	G. M. Strampelli	Unveiling a population of sub-stellar binary companions in a young cluster: HST survey of the Orion Nebula Cluster in the H <sub>2</sub> O 1.4 $\mu$ m absorption band
P1-16	C. Fontanive	The new COPAINS tool for target selection and orbital characterisation of direct imaging systems
P1-17	D. Tamayo	Detecting distant, sub-Jovian planets in scattered light through their circumplanetary debris disks
P1-18	A. Skemer	Imaging Temperate Exoplanets
P1-19	Z. Briesemeister	High Spatial Resolution Thermal Infrared Integral Field Spectroscopy
P1-20	G. Singh	Active minimization of non-common path aberrations using a self-coherent camera for imaging exoplanetary systems.
P1-21	C. Dahlqvist	RSM detection map for direct exoplanet detection in ADI sequences
P1-22	E. Bendek	Deformable Mirrors Controller Architectures for High-Contrast Imaging Overview
P1-23	L. Y. C. Leboulleux	How to speed up your simulations of ground-based images
P1-24	J. H. Girard	Generating Realistic Coronagraphic Images of Point Source Detections with JWST's NIRCam and MIRI
P1-25	J. Llop Sayson	Searching for Alpha Centauri A Companions with the James Webb Space Telescope MIRI Coronagraphic Mode
P1-26	C. Mejia Prada	The WFIRST Coronagraph telescope simulator: Building a coronagraph calibrator
P1-27	J. Gonzalez-Quiles	WFIRST Coronagraph Exoplanet Scene Simulations

### **Exoplanet Theory**

No.	Name	Title
P2-01	Y. Aoyama	Theoretical modeling of H $\alpha$ spectral profile with 1D-radiation-hydrodynamic simulation: constraining the accretion rate and mass of the protoplanets PDS70b and c
P2-02	S. WANG	Formation of Planetary Systems in Mean Motion Resonances



### **Disk Imaging**

	Name	Title
P3-01	M. Honda	Water ice mapping toward protoplanetary disk
P3-02	Y. Yang	Subaru Telescope High-contrast Observations of disks in multiple systems
P3-03	S. Jin	New constraints on the dust and gas distribution in the LkCa 15 disk
P3-04	S. Z. Takahashi	Structure of the protoplanetary disk around V1094 Sco obtained from dust continuum emission and SED
P3-05	M. Momose	Investigating the gas-to-dust ratio in the protoplanetary disk of HD 142527
P3-06	S. Mayama	ALMA reveals a misaligned, HCO <sup>+</sup> -rich, inner gas disk inside the large cavity of the transitional disk around J160421.7-213028
P3-07	S. Kim	The derivation of the dust properties using the synthetic ALMA multiband analysis
P3-08	S. Kim	The detection of a dust ring beyond the outer edge of the dust disk around CR Cha
P3-09	G. Singh	Discovery of an azimuthal density gradient in a gas-rich debris disk possibly related to a massive collision
P3-10	C. Perrot	First resolved observations of a highly asymmetric debris disc around HD 160305 with VLT/SPHERE
P3-11	C. Perrot	First detection of a very sharp ring in near-infrared light with VLT/SPHERE around HD 121617.
P3-12	N. Engler	SPHERE Observations of Debris Disks
P3-13	J. Olofsson	Dust production in young debris disks
P3-14	J. Mazoyer	The Surprising Scattering Phase Function of HR 4796 A
P3-15	S. G. Wolff	HD 146897; An Icy Debris Disk as seen by the Gemini Planet Imager
P3-16	J. Patience	A Survey for Resolved Debris Disks in the Sco-Cen Association
P3-17	J. Hom	Comparison of PSF Subtraction Algorithms on Disk Imaging Data
P3-18	C. A. Grady	The Eroding Disk of AU Mic: Implications for the Habitability of M-star Terrestrial Planets
P3-19	P. Hinz	The Hunt for Observable Signatures of Terrestrial planetary Systems (HOSTS): How Much Dust should We Expect in the Habitable Zone?
P3-20	E. S. Douglas	A high-contrast SmallSat Mission Concept
P3-21	G. M. Aerna	SPHERE reveals warped disk around HD 139614

### **Disk Theory**

No.	Name	Title
P4-01	R. T. Tominaga	Formation of axisymmetric substructures via secular instabilities triggered by dust-gas friction and turbulent viscosity in protoplanetary disks
P4-02	Y. Sakurai	Clustering and collision statistics of dust particles in weakly compressible turbulence in protoplanetary disks
P4-03	M. Kunitomo	Dispersal of Protoplanetary Disks with Magnetically-driven and Photoevaporative Winds
P4-04	R. Nakatani	Radiation Hydrodynamics Simulations of Photoevaporating Protoplanetary Disks with Various Metallicities

### **Instrument and Technology**

No.	Name	Title
P5-01	F. Cantalloube	SPHERE: the current contrast limitations

P5-02	O. Guyon	Prototyping High Contrast Imaging for ELTs on SCEXAO: Users' Guide and Recent Highlights
P5-03	J. Zhang	New NIR Polarimetric Differential Imaging Modes on the Subaru Coronagraphic Extreme Adaptive Optics Instrument
P5-04	A. Sahoo	Astrometry and Photometry with Satellite Speckles
P5-05	D. Vassallo	Overview of the coronagraphic capabilities of SHARK-NIR, the second-generation high contrast imager for the Large Binocular Telescope
P5-06	E. Carolo	XAO-assisted coronagraphy with SHARK-NIR: from simulations to laboratory tests
P5-07	S. Itoh	New Symmetrical Formulation of Hexagonally Segmented Telescopes
P5-08	R. Galicher	Wrapped Vortex: a Cheap Achromatic Coronagraph Phase Mask
P5-09	D. Rouan	Continuous phase mask "à la four-quadrant" optimized for achromatism and bandpass.
P5-10	J. Nishikawa	Combination of apodized pupil and phase mask coronagraph for Subaru Telescope
P5-11	J. Lozi	Polychromatic analysis of the coronagraphs in SCEXAO
P5-12	C. Lopez	Chromatic Performance Of A Vector Vortex Coronagraph
P5-13	J. G. Kuhn	SLM-based Digital Adaptive Coronagraphy: Status, performance update, and future prospects
P5-14	K. Fogarty	Towards High Throughput and Low-Order Aberration Robustness for Vortex Coronagraphs with Central Obstructions
P5-15	K. Enya	Heritage of technology for mid-infrared coronagraph onboard space-borne telescopes for exoplanet characterization
P5-16	M. N'Diaye	Imaging short orbit exoplanets from the ground with novel Apodized Pupil Lyot Coronagraphs
P5-17	T. Currie	Developing and Demonstrating Linear Dark Field Control for Exo-Earth Imaging with the Ames Coronagraph Experiment Testbed
P5-18	R. Belikov	Theoretical Performance Limits for Coronagraphs on Obstructed and Unobstructed Apertures: How Much Can Current Designs be Improved?
P5-19	R. Juanola-Parramon	Sensitivity to telescope aberrations for exoplanet detection with the LUVUOIR coronagraph instrument ECLIPS
P5-20	S. Hildebrandt	SISTER: Simulating Exoplanetary Systems as observed with Starshade
P5-21	A. Vigan	On-sky validation of the ZELDA wavefront sensor for the calibration of non-common path aberrations in VLT/SPHERE
P5-22	S. P. Bos	Focal-plane wavefront sensing with the vAPP: on-sky demonstration at SCEXAO
P5-23	S. B. Vievard	Overview of focal plane wavefront sensors to correct for the Low Wind Effect on SUBARU/SCEXAO
P5-24	M. Langlois	Mach-Zehnder Wavefront sensor for XAO: From laboratory tests to on sky measurements using the SCAO capability of CANARY at the William Hershel Telescope
P5-25	G. W. Allan	Deep Neural Networks Improve the Dynamic Range of Lyot-based Low Order Wavefront Sensing
P5-26	A. Takahashi	Laboratory demonstration of a cryogenic deformable mirror for wavefront correction of space-borne infrared telescopes
P5-27	A. J. E. Riggs	Results with FALCO, a Software Package for Coronagraphic Wavefront Correction
P5-28	E. Cady	Wavefront control and calibration for the WFIRST Coronagraph Instrument
P5-29	D. Sirbu	Applications of Multi-Star Wavefront Control to WFIRST, HABEX, and LUVUOIR
P5-30	M. Perrin	Wavefront Control and Modeling for High Contrast on Segmented Apertures: Results from the HiCAT Testbed
P5-31	A. Potier	Comparing Focal Plane Wavefront Sensors on THD2 bench : Self-coherent camera, Pair Wise Probing and COFFEE
P5-32	P. Baudoz	Overview of the THD2 performance

P5-33	T. Groff	The Parabolic Deformable Mirror Testbed at Goddard Space Flight Center
P5-34	R. E. Morgan	Assembly, Integration, and Testing of the Deformable Mirror Demonstration Mission (DeMi) CubeSat Payload
P5-35	J. Llop Sayson	New high contrast technology demonstrations at the High-Contrast Spectroscopy Testbed for Segmented Telescopes (HCST)
P5-36	G. Otten	Performance simulations of the high-res characterization of directly imaged planets with HiRISE
P5-37	C. Beichman	The Promise of Diffraction Limited Spectrometers for Exoplanet Characterization
P5-38	C. Coker	Progress Towards a Laboratory Demonstration of a Multi-Object, Single-Mode Fiber Spectrograph
P5-39	E. Huby	Spectroscopy below the diffraction limit with FIRSTv2 at the Subaru Telescope
P5-40	R. D. Stelter	An Introduction to SCALES, the Next-Generation Exoplanet Spectrograph
P5-41	G. MORETTO	Partially Filled Aperture Interferometric Telescopes Achieving Large Aperture and Coronagraphic Performance — The Exo-Life Finder (ELF) Telescope.
P5-42	D. Echeverri	Vortex Fiber Nulling for Exoplanet Observations: Concept, Laboratory Results, and Planned On-Sky Deployment
P5-43	E. Serabyn	Detecting companions inside the coronagraphic regime with nulling interferometry
P5-44	F. Martinache	Robust high contrast imaging with kernel-nulling interferometry
P5-45	E. Maier	Implementing Multi-wavelength Fringe Tracking for the LBTI's Phase Sensor, PHASECam
P5-46	K. H. Yip	Pushing the Limits of Exoplanet Discovery via Direct Imaging with Deep Learning

### **Observation/Data Reduction Techniques**

No.	Name	Title
P6-01	M. Perrin	Data Processing and Calibrations for the Gemini Planet Imager Exoplanet Survey
P6-02	R. van Holstein	A highly-automated end-to-end pipeline to reduce VLT/SPHERE-IRDIS polarimetric data
P6-03	A.-M. LAGRANGE	Comparison between SPHERE and GPI astrometries
P6-04	G. Zhao	High-contrast Imaging technique combining IRS and ADI
P6-05	N. I. Godoy Barraza	New algorithms to improve the quality of NACO coronagraphic images.
P6-06	J. Kammerer	Studying giant planet formation with Fourier plane imaging techniques
P6-07	Y. Xin	Numerical Investigations of Coronagraphic Self-Calibration
P6-08	P. Patapis	Exploring the limits of directly imaging exoplanets with the Medium Resolution Imaging Spectrograph on JWST MIRI
P6-09	B. Sutcliffe	A vector Apodising Phase Plate view of an exoplanet atmosphere
P6-10	I. Waldmann	Atmospheric retrievals of directly imaged planets using TauREx3 and deep learning
P6-11	N. Nikolaou	Refining exoplanet atmospheric retrievals with information-theoretic methods

### **Combination**

No.	Name	Title
P7-01	A. Boehle	Combining high contrast imaging and radial velocities to constrain the planetary architecture of nearby stars
P7-02	M. Kenworthy	Results from the Beta Pictoris b Hill Sphere Transit Campaign
P7-03	D. Savransky	Looking for Planets in all the Right Places: Target Selection for Direct Imaging
P7-04	J. H. Girard	The 2019 WFIRST Exoplanet Imaging Data Challenge

**Future Plan and Facility**

No.	Name	Title
P8-01	M. Fitzgerald	An Overview of the TMT Planetary Systems Imager
P8-02	O. Absil	The game-changing promises of ELT/METIS for exoplanet imaging
P8-03	M. Houlle	Exoplanet direct detection and characterization with the ELT/HARMONI integral field spectrograph
P8-04	R. Hu	Exoplanet Sciences with Starshade
P8-05	R. Morgan	A Standard comparison of exoplanet yield for the LUVOIR and HabEx Concept Studies
P8-06	K. Stapelfeldt	The NASA/NSF Extreme Precision Radial Velocity Initiative
P8-07	K. Stapelfeldt	The NASA Exoplanet Exploration Program Science Gap List

**Others**

No.	Name	Title
P9-01	M. Ban	Chasing free-floating planet from a parallax observation of a microlensing event
P9-02	T.-S. Pyo	High contrast shock emission structures around VV CrA in datacube data achieved by high spectral resolution (R ~45000)
P9-03	K. Takizawa	Vegetation red edge on water planets around M-dwarfs