



PROGRAMME

XMM-Newton Workshop 2021

A HIGH-ENERGY VIEW OF EXOPLANETS AND THEIR ENVIRONMENTS

Monday, 24 May 2021 (CEST)

Focus: Planetary atmospheres		Chair: Katja Poppenhaeger
15:00	<i>Schartel, Norbert - Welcome</i>	
15:05	<i>Kreidberg, Laura - Hot Takes on Highly Irradiated Exoplanet Atmospheres</i>	
15:35	<i>Johnstone, Colin - Atmospheric losses and stellar activity</i>	
16:05	<i>Rockcliffe, Keighley - The high energy environment and atmospheric behavior of K2-25b</i>	
16:15	<i>Ketzer, Laura - Estimating the atmospheric mass loss of V1298 Tau's four young planets and the role of the host star in planet population studies</i>	
16:25	<i>Fernandez, Jorge - Analysis of X-ray driven atmospheric loss on three-planet system K2-136</i>	
16:35-17:00	Workshop Photo / Break	Chair: Yamila Miguel
17:00	<i>Branduardi-Raymont, Graziella - X-ray views of our solar system</i>	
17:30	<i>Rogers, James - Photoevaporation vs. Core-Powered Mass-Loss</i>	
17:40	<i>Sanz-Forcada, Jorge - X-exoplanets coronal models and planet photoevaporation</i>	
17:50	<i>Hallat, Tim - Sculpting the sub-Saturn Occurrence Rate via Atmospheric Mass Loss</i>	
18:00	<i>Hazra, Gopal - Effect of Stellar Coronal Mass Ejections (CMEs) and Flares on the atmosphere of HD189733b and its transit signature</i>	
18:10	<i>Herbst, Konstantin - INCREASE - A model suite to study the INfluence of Cosmic Rays on Exoplanetary AtmoSpherEs</i>	
18:20	<i>Rodgers-Lee, Donna - The impact of energetic particles on the evolving Earth and young exoplanets</i>	
18:30	End of Day 1	

Tuesday, 25 May 2021 (CEST)

Focus: Stellar magnetic activity		Chair: Celia Sanchez
15:00	<i>France, Kevin - Ultraviolet Observations of Exoplanet Host Stars: Recent Results and the Landscape for the Next Two Decades</i>	
15:30	<i>Pineda, J. Sebastian - The Far Ultraviolet M-dwarf Evolution Survey: The Rotational Evolution of High-Energy Emissions</i>	
15:40	<i>Maggauda, Enza - Probing activity and rotation of M dwarfs with X-rays and photometric timeseries</i>	
15:50	<i>Ilin, Ekaterina - Giant white-light flares on fully convective stars occur at high latitudes</i>	
16:00	<i>Bogner, Mirjam - Starspot modulation and flares of M dwarfs with habitable zones accessible to TESS</i>	
16:10	<i>Coffaro, Martina - The X-ray activity cycles of young solar-like stars</i>	
16:20	<i>Varga, Attila - Bright in the UV but Faint in X-rays: Young Late-type Stars, or Main Sequence Imposters?</i>	
16:30-17:00	Break	Chair: Mario Giuseppe Guarcello
17:00	<i>Kubyshkina, Daria - Stellar rotation and its connection to the evolution of hydrogen-dominated atmospheres of exoplanets</i>	
17:30	<i>Stelzer, Beate - X-ray emission from ultracool dwarfs</i>	
17:40	<i>Getman, Konstantin - X-ray Super-Flares From Pre-Main Sequence Stars: Energetics, Frequency, Loop Geometry, Comparison With Solar Flares</i>	
17:50	<i>Paudel, Rishi - Simultaneous multi-wavelength observation of flares on highly active M dwarf: EV Lacerate</i>	
18:00	<i>Boro Saikia, Sudeshna - A deep learning approach to understand solar/stellar XUV activity</i>	
18:10	<i>Nuñez, Alejandro - An Updated X-ray Activity-Rotation Relation in Low-Mass Stars in Praesepe and the Hyades</i>	
18:20	<i>Guedel, Manuel - XUV Activity Evolution of Main-Sequence Stars and its Relevance for Habitable Planets</i>	
18:30	End of Day 2	

Wednesday, 26 May 2021 (CEST)

Focus: Star-planet interactions		Chair: Sudeshna Boro Saikia
15:00	<i>Shkolnik, Evgenya - Measuring the Magnetic Fields of Exoplanets with Star-Planet Interactions</i>	
15:30	<i>Alvarado-Gomez, Julian - Coronal Mass Ejections and Exoplanets: A Numerical Perspective</i>	
16:00	<i>Carolan, Stephen - Star-planet Interactions in AU Mic b: High Energy Irradiation vs Strong Stellar Winds</i>	
16:10	<i>Ilic, Nikoleta - Tidal star-planet interaction revealed by its impact on stellar activity</i>	
16:20	<i>Kavanagh, Robert - Planet-induced radio emission from the coronae of M dwarfs</i>	
16:30-17:00	Break	Chair: George King
17:00	<i>Pillitteri, Ignazio - Stellar coronae and the harsh environment where hot Jupiters live</i>	
17:30	<i>Cohen, Ofer - Exoplanet Modulation of Stellar Coronal Radio Emission</i>	
17:40	<i>Villareal D'Angelo, Carolina - GJ 436b and the stellar wind interaction: simulations constraints using Lyα and Hα transits</i>	
17:50	<i>Chebly, Judy J. - Destination exoplanet: Habitability conditions influenced by stellar winds properties</i>	
18:00	<i>Acharya, Anshuman - Role of Star Planet Interactions in the Observed X-Ray Activity of HD179949</i>	
18:10	<i>Colombo, Salvatore - Hot Jupiters accreting onto their parent stars: effects on the stellar activity</i>	
18:20	<i>Campbell-White, Justyn - STAR-MELT: STellar AccRetion-Mapping with Emission Line Tomography</i>	
18:30	End of Day 3	

Thursday, 27 May 2021 (CEST)

Focus: Extreme environments of planets and stars		Chair: Jorge Sanz
15:00	<i>Gaensicke, Boris - The end of the worlds</i>	
15:30	<i>Bourrier, Vincent - Transiting exoplanets as probes of the stellar and planetary environments</i>	
16:00	Poster presentations: H. Anilkumar, M.A. Diaz Teodori, J. Drake, S. Estrada-Dorado, M.G. Guarcello, L. Harbach, A. Louca, M. Narang, K. Poppenhaeger, M. Prasow-Émond, L. Rebull, E. Schreyer, M. Schulik, A. Sicilia-Aguilar, A. Volvach, S. Wolk.	
16:30-17:00	Break	Chair: Ofer Cohen
17:00	<i>Micela, Giusi - Star-planet interactions at young ages</i>	
17:30	<i>Foster, Grace - A new catalog of high-energy irradiation and evaporation of exoplanets</i>	
17:40	<i>King, George - EUV irradiation of exoplanet atmospheres occurs on Gyr time-scales</i>	
17:50	<i>Hlavacek-Larrondo, Julie - First Detection of Exoplanets and Brown Dwarfs Orbiting X-Ray Binaries via Direct Imaging</i>	
18:00	<i>Tombesi, Francesco - The Impact of The Supermassive Black Hole and Tidal Disruption Events on Galactic Habitability</i>	
18:10	<i>Vargas-Gonzales, Jaime - The Orion Radio All-Stars: High-energy processes in YSOs with the VLA, ALMA and the VLBA</i>	
18:20	<i>Mesquita, Amanda - Galactic cosmic ray propagation through M dwarf astrospheres</i>	
18:30	End of Day 4	

Friday, 28 May 2021 (CEST)

Focus: New missions		Chair: Lucia Ballo
15:00	<i>Isaak, Kate - CHEOPS: CHaracterising ExOPlanet Satellite -following up on known exoplanets</i>	
15:30	<i>Robrade, Jan - The eROSITA mission and its X-ray all-sky survey</i>	
16:00	<i>Ricker, George R. - Searching Near and Far: Transits and Transients from the Transiting Exoplanets Survey Satellite (TESS)</i>	
16:30-17:00	Break	Chair: Simone Migliari
17:00	<i>Rauer, Heike - The PLATO Mission</i>	
17:30	<i>Colón, Knicole - Exploring Exoplanets and Their Environments with the James Webb Space Telescope</i>	
18:00	<i>Brickhouse, Nancy - An Arcus View of Stellar Space Weather</i>	
18:10	<i>Ramaramanantsoa, Tahina - Time-Resolved Photometry of the High-Energy Radiation of M Dwarfs with the Star-Planet Activity Research CubeSat</i>	
18:20	<i>Scherf, Manuel - The histories of the young sun and the Archean Earth's Atmosphere</i>	
18:30	<i>Katja Poppenhaeger - Closing remarks</i>	
18:35	End of workshop	