## **BEACON 2023 Poster List**

Poster session I (Monday 8 <sup>th</sup> )			
Number	Submitter	Institution	Abstract title
1	Caballero, Jose	САВ	Recipes for delicious Earth twins
2		Austrian Academy of Sciences	The risk of rocky planets around red dwarfs to become Exo-Venuses –
2	Carone, Ludmina	Austrian Academy of Sciences	VPLANET/MagmOc V2.0 Multi-Outgas
3	Corrigan, Alie	САВ	Exploring the Prebiotic Chemistry of Europa
	Crosni Samuelo	Now York University	Terrestrial Planet formation Simulations:
-	Crespi, Samuele	New fork oniversity	Homogeneous Comparison between Methods
5	Forus Martin	laroslav Hevrovský Institute	Theoretical investigation of phosphine synthesis over acidic dust in
		Jaroslav neyrovský histitute	Venus atmosphere
6	Gillen Cat	University of Durham	Revisiting the Oumuamua Debate: The 'Problem' of the Priors
0	Ginen, cat	Oniversity of Durnam	and its Value to Astrobiology
7	Hilchonbach Martin	MPI for Solar System Research	In-situ measurements of the physical properties
		Wir Fior Solar System Research	of cometary dust particles
8	Laine, Pauli	University of Jyväskylä	White Dwarfs and Icy Worlds - Evolving Habitability
9	Martinez-Henares, Antonio	САВ	Unveiling the high-velocity jet powered by the massive star MWC349A
10	Mendiguita Ignacio	САВ	The challenge of detecting forming planets in protoplanetary disks
10			around young stars.
11	Murante, Giuseppe	INAF	Are planets with large Earth-Similarity Index really habitable?
12	Silva Laura	INAF	Modelling habitability and observability of rocky planets: balancing
			climate complexity with interpretation requirements
13	Vinogradoff Vassilissa	CNRS	First interplay between abiotic organics and minerals in
- 15			astrophysical aqueous environments: what happens?
14	Wang Wei	Chinese Academy of Sciences	The Tianlin Mission: a UV-OPT-NIR Large Aperture Space Telescope for
14		Chinese Academy of Sciences	Habitable Worlds
15	Wong, Teresa	University of Münster	Evolution of layers in subsurface oceans by double-diffusive convection
16	Ambrosio, Biagio	INAF	Exploration of the Moon between communication and science
17	Amsler, Alizee	Université Aix-Marseille	Ocean-atmosphere equilibrium on primitive icy moons
18	Angerhausen, Daniel	ETH Zürich	Machine learning-based parameterizations of pressure-temperature
10			profiles for characterizing exoplanets
19	Boukrouche, Ryan	Stockholm University	The end of habitability on water-rich rocky exoplanets

20	Chen, Zhopeng	CNRS	Unique ventifacts and related aeolian conditions at Zhurong landing
			site, Utopia Planitia, Mars
21 0	de Sanctis, Cristina	INAF	Ma_MISS on Rosalind Franklin rover: the first spectral investigation of
			the Martian subsurface
22	Errico, Adriana	University of Southern Queensland	Hot Jupiter - cold Jupiter. A complex sibling relation
23	Feignon, Jean-Guillaume	Vrije Universiteit Brussel	Towards a new classification of impact-related aggregated particles:
25			constraints from the Chicxulub proximal ejecta blanket
24	Fortier, Valentin	Universite de Louvain	Abiotic CH4 production capacity of Earth-like and Mars-like
			environments: an experimental approach.
25	Günther, Maximilian	ESA	Habitable(?) Worlds and Stellar Flares
26	Hansen, Janina	ETH Zürich	Testing the Habitable Zone Concept with the Future LIFE Telescope
27	Libert, Anne-Sophie	University of Namur	Dynamical constraints on extrasolar system
20	Maris Michala		Modelling refraction in habitable exoplanets:
20		INAF	The ARTECS/Refract Project
20	Mattaoni Biatro	Eroo University Perlin	Tectonic setting at Thrace Macula on Europa and its
29	Matteon: Pietro	Flee Oniversity Berlin	astrobiological implications
20	Teodori, Matteo	INAF	Volatiles emission from a cavity on a planetary surface using
50			Smoothed Particle Hydrodynamic
21	Thaskeena, A	Cochin University of Science and	Radiogenic Heating of Comet Interior Considering Accretion and
51		Technology	Possibility for Microbial Habitable Zones
32	Jeancolas, Cyrill	University of Durham	Is astrobiology serious science?
22	Mora, Maria	JPL	Our Earthly Perspective: History and Effects on Exoplanet Science and
33			Astrobiology
24	Perkins, Kala		ASTROBIOETHICS:
54			An Inquiry into the Emergence and Perpetuity of Life
25	Persson, Erik	Lund University	What is Space Humanities and what does it have to do with
35			astrobiology?
26	Persson, Erik	Lund University	On the asymmetry between proving that a world is inhabited and
36			proving that it is not
37	Royle, Scarlett	Liverpool John Moore University	There is no Planet B: Don't Believe the Billionaires
20	Sánchez Garrido, Juan Antonio	University of Almería	Sedimentary, mineralogical and geomorphological features consistent
38			with an impact structure (province of Almería SE Spain)
39	Cavalazzi, Barbara	University of Bologna	Geomicrobiological characterization of Antarctic sandstones –
			Preliminary results

Poster session II (Tuesday 9 <sup>th</sup> )			
Number	Submitter	Institution	Abstract title
1	Aguirre, Jacobo	САВ	Network science to study the emergence of complexity in the origin of life
2 A	Alonso-PintAdo, Eduardo	CAB	Abiotic synthesis and bioaffinity detection of a key peptide in the
	Alonso-PintAdo, Eduardo	САВ	manipulation of phosphate group
2	Amila Disarda	CAR	Light-independent coupled C, H, N, S and Fe biogeochemical cycles operating
3		САВ	in the deep subsurface of the Iberian Pyrite Belt: Astrobiological implications
1	Ponost Tom	University Aix Marseille	Impact of transport in protoplanetary disks in the formation of
-			complex organic molecules
5	Bezaly Orr Bose	University of Amsterdam	Prebiotic amino acid-clay interactions: adsorption of GABA and proteinogenic
	bezaly, on hose		amino acids on Ca-Montmorillonite clay
6	Campruhi Eloi	University of Texas Rio Grande	The transition between Hadean geochemistry and ancient biochemistry –
0		Valley	What are we missing?
7	Civis Svatonluk	Jaroslav Hovrovsky Instituto	Infrared Spectra of Small Radicals for Exoplanetary Spectroscopy: OH, NH, CN
		Jaroslav neyrovský histitute	and CH: The State of Current Knowledge
8	Civis, Svatopluk	Jaroslav Heyrovsky Institute	Formation of (Per)Chlorates on Mars
٩	Drant, Thomas	Institut-Pierre-Simon Laplace	Optical properties of exoplanet haze analogues :
Э			new data from 0.3 to 50 microns
10	Fantuzzi Folino	University of Kent	Boronyl compounds as interstellar boron carriers: Investigating the B–O bond
10			in astrochemistry and astrobiology
11	Fourre, Isabelle	Sorbonne University	Taking the path to molecular complexity with quantum chemistry
12	He, Yuanyuan	National Museim of Natural History	The evolution of nucleobases under asteroidal aqueous alteration
13	Herreros Cid, Isabel	САВ	From helical flows to the origin of life
14	Horroros Cid Isabol	CAR	Potentially favourable environments for life on ancient Mars: Coprates
14			Catena, a study case.
15	Huet Leon	Sorbonne University	A prebiotic chemistry pathway discovered by a fully agnostic ab-initio
15			molecular dynamics method
16	lavaux Emmanuelle	University of Liége	The ICDP BASE (Barberton Archean Surface Environments) project: exploring
10	Javaux. Emmanuene		early Earth and distant habitability and life.
17	Kaestner Johannes	University of Stuttgert	Formation of Complex Organic Molecules studied with Computational
	Traestner, Jonannes University of Stuttgart	onversity of studgart	Chemistry and Machine-Learning Approaches
10	Koyama, Shungo	University of Tohoku	Production of atmospheric formaldehyde on ancient Mars: implications for
10			ribose formation
10	Leyva, Vanessa	Université Cote d'Azur	On the origins of life's homochirality: reliable quantification of sugar and
19			amino acid enantiomers in astrophysical samples

20	Li-Hau. Fatima	ELSI	Carbon fixation and energy acquisition pathways of microbial communities in
			Precambrian analogue iron-rich hot springs
21	21 Lopez-Garcia, Antonio CAB	Mineral interaction with cyanide. Aqueaous interfaces basedon prebiotic	
			chemistry condition
22	Lozada-Chavez. Irma	University of Leipzig	Complex multicellular organisms on Earth have evolved from high non-coding
			DNA and intron-rich genomes
23	Maratrat. Louis	Institut-Pierre-Simon Laplace	New prospects about Titan's Tholins hydrolysis: pH variation
			effects during the neutral hydrolysis.
24	Marlin, Tess	CalTEch	Chemical gardens as analogues for prebiotic chemistry on ocean worlds
25	Marlin, Tess	CalTech	Characterizing propyne, a relevant molecule to Titan's atmosphere and
			surface
26	Marre. Samuel	CNRS	Studying hydrothermal deep-sea vents at lab scale:
			from prebiotic chemistry to microbial life under extreme conditions
27	Megias, Andres	САВ	Chemical complexity in starless and pre-stellar cores
28	Nehzati, Susan	Lund University	Probing Stevns Klint K-Pg Boundary with X-rays
29	Palahikvan Havk	University of Vienna	Application of methanogenic archaea as cell factories for life support systems
	r alabikyan, nayk		in space
30	Quitian-Lara, Heidy	University of Kent	Hunting molecules in protostellar regions: Surveys and experiments on
50		Oniversity of Kent	prebiotic molecules
31	Remusat, Laurent	National Museim of Natural History	Organic aromatic fraction in carbonaceous chondrites
32	Ruiz Bermejo, Marta	CAB	The Complex Wet Chemistry of HCN: From the generation of Biomolecules to
			the production of Macromolecular Systems with Emergent Properties
33	Shvetsova Anastasiia	Université Claude Bernard Lyon 1	Phosphorylation of prebiotic precursors on the early Earth
34	Singer, Kelsi	South West Research Institute	Empirical Data on Impact Crater Ejecta from Across the Solar
54			System and Astrobiological Implications
35	Siro, Flavio	Sorbonne University	Mechanism and Free-Energy Landscape of Peptide Bond
		Solution of Wersity	Formation at the Silica–Water Interface
36	Sundelin. David	Stockholm University	Reactions of radical cationic isomers with hydrocarbons
37	Suslina, Elena	Austrian Academy of Sciences	Dust and molecules in edge-on protoplanetary discs
38	Wilkinson, Reece	University of Kent	The Survivability and Evolution of Bacteria in Planetary Impacts
20	Yoshida, Tatsou	Tohoku University	Duration of a hydrogen-rich reduced environment on early Earth
39			estimated by hydrodynamic escape simulations
40	Blank Jennifer	NASA Ames Research Centre	Putative Mineral Biomarkers in Terrestrial Volcanic Caves – Could They be an
40			Analog Target in the Search for Evidence of Life on Mars?

Poster session III			
Number	Submitter	Institution	Abstract title
1	Alberini, Andrew	INAF	NASA Mars 2020 and ESA ExoMars rovers: UV irradiation experiments of organo-sulfate martian analog samples to support detection of organics on Mars
2	Arribas, Miguel	САВ	A novel method for the extraction of proteins in acidic, clay-rich environment
3	Azemard, Clara	Université Paris-Est	Looking for life on Mars: Assessment of the analytical capacities of the MOMA GC-MS instrument of the Exomars mission for a variety of samples with the Engineering Test Units (ETU)
4	Battistuzzi, Mariano	University of Padova	Responses to a simulated M-Dwarf Starlight Spectrum by eukaryotic Photosynthetic Organisms with Different Levels of Complexity, from Microlgae to Plants
5	Bolmont, Emeline	University of Geneva	Looking for biosignatures in exoplanets atmospheres with RISTRETTO and ANDES: a topic at the heart of the Life in Universe Center in Geneva
6	Cario, Anais	CNRS	Use of extreme microfluidics for the study of extremophilic microorganisms at laboratory scale
7	Chou. Luoth	NASA	Searching for life-as-we-don't-know-it using planetary mass spectrometry
8	Culka, Adam	Charles University Prague	Raman spectroscopic studies of gypsum endoliths from Israel, Sicily and Poland
9	Czuka, Joleen	Columbiua University	Investigating lipid biosignatures in lava tubes

			TRIPLE-IceCraft – Demonstration of a Retrievable Melting Probe to
10	Espe, Clemens	GSI systems	Transport Scientific Payloads into Subglacial Lakes or Oceans at the
			Ekström Ice Shelf
11	Fatton, Matilda	University of Bern	Use of spectropolarimetry for the remote detection of homochirality
			associated to life beyond Earth: microbial life as a benchmark
12	Feller, Tom	University of Líége	The limits of photosynthesis in the Far-red : adaptation of light-harvesting
			complexes in Euglena gracilis
13	Ferrari, Marco	INAF	VIS-NIR measurement and sampling campaign in the Río Tinto area in
			support of the Ma_MISS scientific activity
			Is ozone a reliable proxy for molecular oxygen? Optimising sample
14	Gonthier, Rachel	Institut-Pierre-Simon Laplace	preparation under MOMA instrument conditions: extraction and
			derivatisation of organic molecules on Mars
15	Heinz Jacob	THEF	Isolation of halotolerant species from environmental samples and
			microbial stress responses after perchlorate exposure
16	16 Kereszturi Akos	Konkoly Observatory	Linking biomarkers to geological context using analogue samples – review
		Konkory Observatory	to exploit EAI capabilities
17	Kozakis, Thea	Technical University of Denmark	Is ozone a reliable proxy for molecular oxygen?
10	Kuzucan, Azena	University of Geneva	Simulated surface conditions of exoplanets with different atmospheric
			compositions and their influence on the survival of E.coli K-12
19	La Rocca, Nicoletta	etta University of Padua	The Euganean Thermal District microbiota biodiversity: discovery of a
			new cyanobacteria species synthetizing chl f
20	Lara Yannick	University of Liége	Cyanobacterial photoprotective pigments as example of robust signatures
			of life
	Liistro, Elisabetta	University of Padua	Responses of the cyanobacterium Synechococcus sp. PCC7335 to FR light
21			enriched spectra and anoxic atmospheres: implications for exoplanet
			habitability and astrobiotechnological applications
22	McLoughlin, Stephen	National Museum of Natural History	Permineralization—a key preservational mode in the search for fossilized
			life on other planets
23	Muscari Maria	Parthenope University of Naples	Physiological Adaptations of the Brine Shrimp A. Salina to Simulated Mars
			Pressure: A New Modelfor Astrobiological Studies
24	Mustieles, Pedro	САВ	Detecting biomolecules in liquid extract for planetary exploration by
27			fluorescence immunoassays
25	Napoleoni, Maryse	FU Berlin	Analysis of organics in salt rich ice grains with mass
25			spectrometry: implications for Europa Clippe
26	Noack, Lena	FU Berlin	Towards a universal tracers portal

27	Paardekooper, Daniel	ESA	Options for post-landing extraction of solid-core samples from the NASA- ESA Mars Sample Return mission.
28	Pagnoscin, Silvia	INAF	Combining Remote Sensing and Lab Analysis to Search For Organics on the Surface of Europa
29	Parro, Victror	САВ	SOLID-LDChip project: searching for biochemical evidences of life by bioaffinity molecular recognition
30	Rodriguez-Moreno, Alicia	САВ	Virus resistance to freeze-thaw cycles
31	Schmidt, Gene	University of Roma 3	Structural analysis of Fractures on Planetary Surfaces as Locations for Endolithic Biosignatures: Insights from a remote analogue in Antarctica
32	Stavrakakis, Hector-Andreas	National Technical University of Athens	OxR: A novel device for Reactive Oxygen Species (ROS) detection for astrobiology and planetary research
33	Torres, Ines	ESA	Detecting biosignatures using molecular assembly pathways with the MOMA mass spectrometer onboard the ExoMars rover
34	Vajda, Vivi	Swedish Museum of Natural History	Fe-species (X-ray absorption spectroscopy) signalling breakdown of organic matter at the continental Permian–Triassic (252 Mya), Sydney Basin, Australia
35	Vincent, Lena	JPL	Preservation and detection of biosignatures under simulated Ocean World surface condition
36	Yesilbas, Merve	Umeå University	Following the water on Mars: Liquid Salty Brine Formation in Mars Analogues in the Mid-IR Region
37	Zetterlind, Alexandra	Utrecht University	Liberation of Organic Matter from Carbonaceous Chondrites into Early Earth's Ponds: Preliminary Results on Tarda Meteorite