

## **1 EARLY STARS AND STELLAR ENVIRONMENTS**

### **P1.1 EFFECTS OF STELLAR X-RAY EMISSION ON PLANET ATMOSPHERES**

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### **P1.2 DARWIN/TPF-I AND THE SEARCH FOR LIFE, THE NEW CONFIGURATIONS**

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### **P1.3 TARGET STAR CATALOGUE FOR DARWIN: NEARBY HABITABLE STAR SYSTEMS**

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### **P1.4 ACTIVITY OF NEARBY MAIN-SEQUENCE G, K, AND M STARS: A DETERMINING FACTOR FOR PLANETARY HABITABILITY**

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**P1.5 CHARACTERISTICS AND EVOLUTION OF HIGH-ENERGY EMISSION OF LOW-MASS STARS: EFFECTS ON PLANETARY HABITABILITY**

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**P1.6 THE CASE OF SUPERHOT JUPITERS**

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## **2 HABITABLE ZONES AND PLANETARY HABITABILITY**

### **P2.1 EUROPA'S RADIATION AND ENERGETIC PARTICLE INDUCED EXOSPHERE: REMOTE DETERMINATION OF SURFACE MATERIALS FROM AN EUROPA ORBITER**

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### **P2.2 AQUEOUS ACIDIC ENVIRONMENTS ON MARS (I): ANCIENT MARS.**

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## ***Poster presentations***

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### **P2.4 STABILITY OF EARTH-LIKE PLANETS**

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### **P2.5 EUROPA'S SURFACE AND SUBSURFACE OCEAN: ASTROBIOLOGICAL IMPLICATIONS**

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### **P2.6 POSSIBLE EXISTENCE OF TERRESTRIAL PLANETS ON HORSESHOE ORBITS IN HABITABLE ZONES OF EXOPLANETARY SYSTEMS**

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### **P2.7 CYCLES OF LIFE ON CRUSTAL PLANETS**

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### **P2.8 REACTIVATION OF POSSIBLE DORMANT BIOLOGY BY THE ONSET OF CONVECTION IN THE ICE SHELL OF EUROPA**

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### **3 PREBIOTIC CHEMISTRY**

#### **P3.1 COSMOLOGICAL NEUTRINOS: CAN THEY CONTRIBUTE TO MOLECULAR HOMOCHIRALITY?**

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#### **P3.2 SPATIO-TEMPORAL HOMOCHIRALITY THROUGH INTENSE REPLICATION AND COMPETITION**

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#### **P3.3 TITAN: AN EXOBIOLOGICAL ENVIRONMENT AFTER THE CASSINI-HUYGENS MISSION**

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#### **P3.4 PROTEIN SUBSTRUCTURES AND THEIR ROLE IN THE EVOLUTION OF LIFE**

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#### **P3.5 ALTERNATIVES TO NUCLEOTIDES AS THE BASIS OF A GENETIC ALPHABET.**

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**P3.6 WHICH COMPOUNDS ARE FORMED WHEN A METEORITE ENTERS THE TERRESTRIAL ATMOSPHERE ? FLASH-VACUUM THERMOLYSIS OF AMINO ACIDS**

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#### **4 LIFE IN EXTREME RADIATION ENVIRONMENTS**

##### **P4.1 BIOLOGICAL EFFECTS OF SECONDARY COSMIC RAYS ON EARTH'S SURFACE**

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##### **P4.2 FIELD EXPERIMENTS WITH UV BIO-DOSIMETERS OVER NORTH POLAR AREAS**

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##### **P4.3 MODELLING THE MARTIAN SUBSURFACE RADIATION ENVIRONMENT**

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## ***Poster presentations***

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### **P4.4 EXTREME DATABASE – SEARCH FOR EXTREME LIFE**

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### **P4.6 SIMULATION OF THE MARTIAN SURFACE UV RADIATION IN EXPERIMENTS WITH EMPHASIS ON MOLECULAR BIOPHYSICS**

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### **P4.7 EXPLORATION AND CHARACTERIZATION OF A NOVEL EXTREMOPHILE, EXIGUOBACTERIUM SP.**

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**P4.8 WAS THE EARLY EARTH SHIELDED FROM UV BY OZONE PRODUCED FROM THE SMOG MECHANISM?**

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**P4.9 RESISTANCE OF ARABIDOPSIS THALIANA SEEDS TO DELETERIOUS CONDITIONS FOUND IN THE SPACE ENVIRONMENT**

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**5 INTERPLANETARY TRANSFER OF LIFE AND EXPERIMENTS IN EARTH ORBIT**

**P5.1 FROM SUPERNOVA TO CONSCIOUSNESS. EVOLUTION OF IRON-BINDING COMPOUNDS. PART 1 – METEORITIES.**

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**P5.2 PRELIMINARY PHYSIOLOGICAL STUDIES TO *THERMOCOCCUS GAMMATOLERANS* EXPOSURE TO SPACE CONDITIONS**

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**P5.3 ECOLOGICAL AND ECONOMIC CONSIDERATIONS FOR SUSTAINABLE BIOGENERATIVE LIFE SUPPORT SYSTEMS FOR MARS**

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**P5.5 CAN MARTIAN BIOTA SURVIVE EXTREME HEATING DURING TRANSFER VIA METEORITES FROM MARS TO EARTH?**

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**6 HUMAN EXPLORATORY MISSIONS**

**P6.1 RESPIRATORY BURST AS A BIOMARKER FOR IMMUNOMODULATORY EFFECTS OF SPACE-FLIGHT CONDITIONS**

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## **7 OTHER**

### **P7.1 LIPIDS BIOMARKERS PROTECTED BY MINERALIZATION IN SULPHATES AS A TOOL FOR ASTROBIOLOGICAL EXPLORATION**

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### **P7.2 THE EFFECT OF TERRESTRIAL MAGNETIC ANOMALIES ON BIODIVERSITY AND ON PRESERVATION OF EXTANT AND EXTINCT FORM OF LIFE**

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### **P7.3 FOSSIL GALLIONELLA MICROBES IN ANCIENT SUBSURFACE HABITATS FROM TERTIARY BASALTS OF EASTERN ICELAND**

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### **P7.4 KINETIC PARAMETERS OF URACIL DOSIMETER IN SIMULATED EXTRATERRESTRIAL UV RADIATION**

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## ***Poster presentations***

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### **P7.5 IRRADIATION BY RADIOACTIVE MINERALS IN IMPACT CRATERS: 2. AN EXAMPLE FROM THE LOCKNE IMPACT CRATER, SWEDEN**

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### **P7.6 DNA DAMAGING EFFECTS OF HEAVY ION AND X-RAY IRRADIATION OF *BACILLUS SUBTILIS* SPORES**

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### **P7.7 EXPERIMENTAL SILICIFICATION OF BACTERIA : SUPPORT FOR IDENTIFICATION OF TERRESTRIAL AND EXTRATERRESTRIAL MICROBIAL SIGNATURES**

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### **P7.9 GLIESE 86B -- A CLOSE MOVING GIANT PLANET IN A BINARY SYSTEM**

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**P7.10 CATHODOLUMINESCENCE APPLIED TO THE DETECTION OF PAST BIOLOGICAL ACTIVITY IN MARTIAN SEDIMENTS**

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**P7.11 CARBON ISOTOPIC ENRICHMENT IN TITAN'S THOLINS: IMPLICATIONS FOR TITAN'S AEROSOLS**

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