

PROGRAMME

Monday, September 28th

Hotel Chandris:

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| 16:00 - 20:00 | Registration and welcome reception |
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Tuesday, September 29th

ROOM: (Q)

Chair V. Shevtsova

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| 8:00 – 9:00 | Registration |
| 9:00 – 9:30 | Opening |
| 9:30 – 10:10 | Medal ceremony and lecture by medallist (Günter Froberg) |
| 10:10 – 10:45 | Coffee break |

Tuesday, September 29th

ROOM TBC Session Physical Science (Vibration)

Chair Lyubimova

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| 10:45 – 11:10 | SUBHARMONIC INSTABILITIES IN VIBRATING FLOWS Jose M. Vega , Jose M. Perez-Gracia and Fernando Varas |
| 11:10 – 11:30 | INSTABILITIES OF VIBROEQUILIBRIA IN RECTANGULAR CONTAINERS Jeff Porter , Ignacio Tinao, Jose Fernandez and Ana Laveron-Simavilla |
| 11:30 – 11:50 | ROLE OF GRAVITY IN INTERFACIAL PATTERN FORMATION BETWEEN BINARY MIXTURES UNDER HIGH FREQUENCY VIBRATION Yuri Gaponenko , Viktor Yasnou, Aliaksandr Mialdun and Valentina Shevtsova |
| 11:50 – 12:10 | FORMATION AND STABILITY OF QUASI-STATIONARY PERIODIC PATTERNS AT FLUID INTERFACE UNDER TANGENTIAL VIBRATIONS AT DIFFERENT GRAVITY LEVELS Tatyana Lyubimova , Andrey Ivantsov and Daniel Beysens |
| 12:10 – 12:30 | FLOWS EXCITED BY EXTERNAL FORCE FIELD IN ROTATING SPHERICAL SHELL WITH INNER CORE Victor Kozlov, Alevtina Ivanova, Nikolai Kozlov and Stanislav Subbotin |
| 12:30 – 12:50 | EXTERNAL LOW FREQUENCY VIBRATIONS IN TWO- PHASE FLOWS IN MICROGRAVITY |

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| | Anna Garcia-Sabaté and Ricard González-Cinca (Student) |
| 12:50 - 14:00 | Lunch |

Tuesday, September 29th

ROOM X Session Life Science (Cell Biology)

Chair A. Sundaesan & J. van Loon

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| 10:45 – 11:10 | TISSUE ENGINEERING OF CARTILAGE ON A 3D RANDOM POSITIONING MACHINE G. Aleshcheva , J. Sahana, R. Hemmersbach, M. Infanger, D. Grimm |
| 11:10 – 11:30 | WOUND HEALING IN MICROGRAVITY: THE BEHAVIOR OF FIBROBLASTS Monica Monici , Francesca Cialdai, Leonardo Vignali, Camilla Mugnaioni, Anna Caselli, Paolo Cirri, Lucia Morbidelli, Alessandra Colciago, Fabio Celotti |
| 11:30 – 11:50 | MICROGRAVITY PROMOTES A PRO-OXIDATIVE PHENOTYPE IN HUMAN ENDOTHELIAL CELLS A. Cazzaniga , S. Castiglioni, M. Janicka, J.A. Maier |
| 11:50 – 12:10 | ELECTROPHYSIOLOGICAL MEASUREMENTS UNDER MICROGRAVITY DURING A SOUNDING ROCKET FLIGHT S. L. Wuest , T. Plüss, C. Hardegger, B. Fleischli, M. Felder, L. Rüdlinger, C. Komotar, M. Egli. |
| 12:10 – 12:30 | COUNTERMEASURES FOR MICROGRAVITY-INDUCED IMPAIRMENT OF WOUND HEALING: THE EFFECT OF ELECTROMAGNETIC FIELDS ON FIBROBLAST ACTIVATION L. Vignali (Student) |
| 12:30 – 12:50 | UNRAVELLING THE INFLUENCE OF SIMULATED HYPERGRAVITY ON THE BEHAVIOUR AND ANGIOGENIC RESPONSE OF ENDOTHELIAL CELLS Miguel Ferreira , Daniel Carvalho, Guilherme Aresta, Raquel Costa-Almeida, Maria Gomez-Lázaro, Jack van Loon, Kim van der Heiden and Pedro L. Granja (Student) |
| 12:50 - 14:00 | Lunch |

Tuesday, September 29th

ROOM V2 Session Physical Science (Diffusion)

Chair

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| 14:00-14:40 | INVITED LECTURE IN LIFE SCIENCE JACK VAN LOON |
| 14:40-15:10 | Short presentation of Posters (1 slide 2 min) Parallel sessions 8,13,27,29,52,76,18,25,83 (Physical science) 1,41,45,34,35,40,59,65,102,105,101 (Life science) |
| 15:10 – 16:00 | Poster watching and Coffee |

Tuesday, September 29th

ROOM XX Session Physical Science (ISS)

Chair: Thodoris Karapantsios

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| 16:00 – 16:20 | SPACE EXPERIMENTAL INVESTIGATION ON HEAT AND MASS TRANSFER PHENOMENA OF TWO-PHASE FLUIDS SYSTEM ONBOARD CHINA SPACECRAFTS Qiusheng Liu , Jingchang Xie and Zhiqiang Zhu |
| 16:20 – 16:40 | ON STRUCTURE AND STABILITY OF TIME DEPENDENT CONVECTIVE FLOWS UNDER MICRO-GRAVITY CONDITIONS ON THE ISS. Christoph Egbers , Florian Zaussinger and Andreas Krebs |
| 16:40 – 17:00 | INVESTIGATION OF THE DYNAMIC BEHAVIOUR OF SURFACTANT ADSORPTION LAYERS FROM THE FASTER EXPERIMENT ONBOARD THE ISS. Libero Liggieri |
| 17:00 – 17:20 | OSCILLATORY GROWTH OF ICE CRYSTAL OBSERVED UNDER MICROGRAVITY CONDITION IN ISS-KIBO Yoshinori Furukawa , Ken Nagashima, Shunichi Nakatsubo, Izumi Yoshizaki, Taro Shimaoka, Haruka Tamaru, Takehiko Sone, Etsuro Yokoyama, Takao Maki and Asuka Yamamoto |
| 17:20 – 17:40 | FASES – A FACILITY DEDICATED TO EMULSION STABILITY IN MICROGRAVITY. FIRST RESULTS ON DILUTE EMULSIONS. Mickaël Antoni, Murielle Schmitt, Libero Liggieri, Francesca Ravera, Danièle Clause and Isabelle Perzon |
| 18:00 - 19:30 | General Assembly |

Tuesday, September 29th

ROOM X **Session Life Science (Microorganisms and bioreactors)**

Chair R.Hemmersbach and K. Slenzka

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| 16:00 – 16:20 | GENE EXPRESSION AND MORPHOLOGICAL RESPONSES OF E. COLI TO ANTIBIOTICS DURING SPACEFLIGHT L. Zea. |
| 16:20 – 16:40 | MODULES-PBR – A PHOTOBIOREACTOR AS STARTING POINT OF A MODULAR LIFE SUPPORT SYSTEM S. Podhajsky, K. Slenzka |
| 16:40 – 17:00 | C.R.O.P. COMBINED REGENERATIVE ORGANIC-FOOD PRODUCTION AND EU:CROPIS – PROGRESSIVE IMPLEMENTATION OF COMMUNITY BASED BIOREGENERATIVE SYSTEMS J. Hauslage, G. Bornemann, K. Waßer1, S. M. Strauch, R.Hemmersbach, M. Lebert |

Tuesday, September 29th

ROOM X **Session Life Science (Facilities)**

Chair M. Lebert

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| 17:00 – 17:20 | LIFE SCIENCES FLIGHT HARDWARE DEVELOPMENT FOR SPACE EXPERIMENTS, RECENT AND UPCOMING BIOLAB EXPERIMENTS Astrid Adrian, Luca Briganti, Markus Franz, Christine Hellweg, Christa Baumstark-Khan, Betty Nusgens, Alain Colige, Peter D. Hansen and Eckehardt Unruh |
| 17:20 – 17:40 | HIGH EFFICIENCY OF GROUND-BASED FACILITIES IN GRAVITATIONAL BIOLOGY R. Hemmersbach, J. Ngo-Anh |
| 18:00 - 19:30 | General Assembly |

Wednesday, September 30th

ROOM:

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| 9:00 – 9:40 | Lecture by 2 nd medallist (Rupert Gerzer) |
| 9:40 – 10:10 | Short presentation of Posters (1 slide 2 min) 8,13,27,29,52,76,18,25,83 |
| 10:10 – 11:20 | Posters and Coffee break |

Wednesday, September 30th

ROOM V2 Session Physical Science (Diffusion)

Chair M. BouALI

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| 11:20 – 11:40 | FIRST RESULTS OF DCMIX-2 EXPERIMENT ON MEASUREMENT OF SORET AND DIFFUSION COEFFICIENTS IN MIXTURES OF TOLUENE-METHANOL-CYCLOHEXANE Aliaksandr Mialdun and Valentina Shevtsova |
| 11:40 – 12:00 | THEORETICAL AND EXPERIMENTAL ANALYSIS OF NON-EQUILIBRIUM FLUCTUATIONS INDUCED BY SORET EFFECT IN TERNARY MIXTURES Henri Bataller , Cédric Giraudet, Fabrizio Croccolo and José Maria Ortiz de Zárate |
| 12:00 – 12:20 | SHADOWGRAPH ANALYSIS OF NON-EQUILIBRIUM FLUCTUATIONS FOR MEASURING TRANSPORT PROPERTIES IN MICROGRAVITY Fabrizio Croccolo , Cédric Giraudet, Henri Bataller, Roberto Cerbino and Alberto Vailati |
| 12:20 – 12:40 | NON-EQUILIBRIUM CONCENTRATION FLUCTUATIONS INDUCED BY THE SORET EFFECT IN MICROGRAVITY José M. Ortiz de Zárate , Ted R. Kirkpatrick and Jan V. Sengers |
| 12:40 - 14:00 | L U N C H |

Wednesday, September 30th

ROOM X Session Life Science (Immune Cells)

Chair M. Monici & D. Grimm

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| 11:20 – 11:40 | IMMUNE MODULATION AND RADIATION MEASUREMENTS FOR ISS/SPACEX-3 FLIGHT RADIATION EXPERIMENT IN SUPPORT OF THE UR-1 PROJECT IN NORMAL HUMAN LYMPHOCYTES Alamelu Sundaresan , Shakawat Bhuiyan, Jinghe Mao, Karla Sue Marriott, Richard Wilkins, Robert Guersey, Ramona Gaza, Pamela Denkins, Willie Williams, Misti Moore, Ivory Ellis, Elvis Okoro, Olivia Madison, Cody Carasquillo, Ayla Diles, Amanda Osborne, Joshua Agee, Shakema Bowman, Daniel Meis and Janet Reudas. |
| 11:40 – 12:00 | AHCC ACTIVATION OF HUMAN LYMPHOCYTES VIA PHENOTYPIC, GENOTYPIC AND DIFFERENTIATION PATHWAY TO AN ADHERENT CELL TYPE. A POSSIBLE COUNTERMEASURE FOR IMMUNE SUPPRESSION IN MICROGRAVITY Alamelu Sundaresan, Loretta Olamigoke, Vivek Mann, Elvedina Mansoor, Ivory Ellis, Elvis Okoro, Koji Wakame, Anil Kulkarni, Hajime Fuji, Marie Françoise Doursout |
| 12:00 – 12:20 | ASSESSING THE EFFECT OF MICROGRAVITY |

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| | SIMULATION ON THE VIABILITY OF IMMUNE CELLS IN WHOLE BLOOD CELL CULTURES M. Van Wallegghem , S. Deckers, K. Tabury, M. Moreels, S. Baatout |
| 12:20 – 12:40 | IMPACT OF SIMULATED MICROGRAVITY ON CELL-MEDIATED IMMUNITY USING THE IN VITRO DTH ASSAY M. Van Wallegghem , M. Moreels, K. Tabury, M. Feurecker, A. Choukèr, S. Baatout |
| 12:40 - 14:00 | L U N C H |

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| 14:00-14:40 | INVITED LECTURE IN PHYSICAL SCIENCE SPIROS ATHANASIADIS |
| 14:40-14:50 | Change of the room |

Wednesday, September 30th

ROOM V2 Session Physical Science (Diffusion, continuation)

Chair José M. Ortiz de Zárate

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| 14:50 – 15:10 | DETERMINATION OF THE THERMODIFFUSION COEFFICIENTS OF WATER-ETHANOL BINARY MIXTURES Estela Lapeira and Mohammed Mounir Bou-Ali (Student) |
| 15:10 – 15:30 | PROCESSING OF DCMIX-1 SPACE EXPERIMENT DATA ON MEASUREMENT OF DIFFUSION AND Soret COEFFICIENTS IN TERNARY MIXTURES Ilya Ryzhkov , Oleg Khlybov and Tatyana Lyubimova |
| 15:30 – 15:50 | MEASUREMENT OF MASS DIFFUSION IN TERNARY MIXTURES OF WATER-ETHANOL-TRIETHYLENGLYCOL BY TAYLOR DISPERSION TECHNIQUE. Jean Claude Legros , Yuri Gaponenko, Aliaksandr Mialdun, Werner Koehler and Valentina Shevtsova |
| 15:50 – 16:10 | OPTIMIZATION OF TAYLOR DISPERSION TECHNIQUE FOR MEASUREMENTS OF MUTUAL DIFFUSION IN BENCHMARK MIXTURES Ana Ribeiro , Cecilia Santos and Valentina Shevtsova |
| 15:40 – 16:20 | Coffee break |

Wednesday, September 30th

ROOM X **Session Life Sciences (Plant Biology)**

Chair: J.Z. Kiss & E. Kordium

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| 14:50 – 15:10 | PLASMALEMMA LIPID BILAYER OF PEA SEEDLINGS IS SENSITIVE TO CLINOROTATION E. Kordyum , O. Nedukha, T. Vorob'eva, V. Grakhov, O .Klymenko, I. Zhupanov |
| 15:10 – 15:30 | NEW MECHANISMS OF PHOTOTROPISM ARE REVEALED FROM EXPERIMENTS USING THE EUROPEAN MODULAR CULTIVATION SYSTEM ON THE ISS J.Z. Kiss , J.P.Vandenbrink, R.E. Edelmann , R. Herranz, F.J. Medina |
| 15:30 – 15:50 | RESULTS OF A SPACE EXPERIMENT - MAGNETIC GRADIENTS SUBSTITUTE FOR GRAVITY AND MECHANOSTIMULATION AFFECTS THE SIZE OF AMYLOPLASTS, THE PUTATIVE GRAVITY- AND MECHANOSENSORS. KH Hasenstein |
| 15:50 – 16:10 | PROGRESSIVE EFFECTS FROM SIMULATED MICRO GRAVITY TO HYPER GRAVITY ON CELL GROWTH AND CELL PROLIFERATION IN THE BRASICACEAE FAMILY Leonardus A. Den Toom , Arancha Manzano, Guus Borst, Martijn Visser, Alan Dowson, Miguel A. Valbuena, F. Javier Medina, Raúl Herranz and Jack J.W.A. van Loon Student |
| 15:40 – 16:20 | Coffee break |

Wednesday, September 30th

ROOM "..." **Session Physical Science (Instability)**

Chair: Hendrik Kuhlmann

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| 16:40 – 17:00 | DEVELOPMENT OF CONCENTRATION-DEPENDENT DIFFUSION INSTABILITY IN REACTIVE MISCIBLE FLUIDS UNDER INFLUENCE OF CONSTANT OR VARIABLE INERTIA Dmitry Bratsun , Olga Stepkina, Alexey Mizev, Konstantin Kostarev and Elena Mosheva |
| 17:00 – 17:20 | EFFECT OF STATIC DEFORMATION ON BASIC FLOW PATTERNS IN THERMOCAPILLARY-DRIVEN FREE LIQUID FILM Linhao Fei , Toshihiro Kaneko, Ichiro Ueno and Donald Roy Pettit |
| 17:20 – 17:40 | OCCURRING CONDITIONS AND FORMATION PROCESS OF SECOND TYPE OF SPIRAL LOOP PARTICLE ACCUMULATION STRUCTURES (SL-2 PAS) IN HALF-ZONE LIQUID BRIDGE |

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| | Aro Toyama , Masakazu Gotoda, Toshihiro Kaneko and Ichiro Ueno |
| 17:40 – 18:00 | DEVELOPMENT OF A SOLUTAL DISTRIBUTION MEASUREMENT TECHNIQUE FOR SELF-REWETTING FLUIDS INVESTIGATION: SELENE SPACE PROJECT Wassilis Tzevelec , Sotiris Evgenidis, Kostas Zacharias, Thodoris Karapantsios and Stefan Van Vaerenbergh |
| 18:00 – 18:20 | GRAVIMAV: A DRONE-BASED PLATFORM FOR MICROGRAVITY RESEARCH Marc Donadiós , Carlos Ferraz, Francesc Suñol and Anna Garcia-Sabaté (Student) |
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Wednesday, September 30th

ROOM "X"

Session Life Science

(Plant Biology continuation and Physiology I)

Chair F. Strollo

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| 16:40 – 17:00 | SIMULATED MICROGRAVITY EFFECTS ON PLANT NUTRITION Ellen Polinski, Oliver Schüler, Monika Wimmer, Heiner Goldbach and Ruth Hemmersbach Student |
| 17:00 – 17:20 | EFFECTS OF HYPER- AND SIMULATED MICRO-GRAVITY ON BONE AND GENERAL PHYSIOLOGY IN ZEBRAFISH LARVAE. Jessica Aceto , Jörg Renn, Rasoul Nourizadeh-Lillabadi, Jeanette Maier, Silvia Bradamante, Peter Aleström, Jack van Loon, Marc Muller |
| 17:20 – 17:40 | FLOTATION AS A METHOD OF UNLOADING TO INDUCE STATURE ELONGATION ASSOCIATED WITH SPACEFLIGHT: EFFECT OF FOUR HOURS FLOTATION Philip Carvil , Juan Gabriel Ríos Kristjánsson, Julia Attias, Thais Russomano and David A Green Student |
| 17:20 – 17:40 | EFFECT OF LONG-TERM EXPOSITION OF MICROGRAVITY ON THE OCULAR COUNTER-ROLLING AND PERCEPTION OF TILT IN 24 COSMONAUTS Emma Hallgren , Ludmila Kornilova, Dmitrii Glukhikh, Ivan Naumov, Hamish MacDougall, Steven Moore, Pierre-François Migeotte, Gilles Clément, André Diedrich and Floris Wuyts Student |

Thursday, October 1st

ROOM:

Joint Session Physical Science and Life Science (Facility and Program)

Chair

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| 09:20 – 09:40 | BENEFITS OF ESA GRAVITY RELATED HANDS-ON PROGRAMMES FOR UNIVERSITY STUDENT CAREERS Natacha Callens, Lily Ha and Piero Galeone |
| 09:40 – 10:00 | ESA UTILISATION PROGRAMME ON THE ISS Thu Jennifer Ngo-Anh, Jason Hatton, Olivier Minster, Eric Istasse, Frank De Winne, Martin Zell and Jon Weems |
| 10:00 – 10:20 | EVALUATION OF MICROGRAVITY RESEARCH IMPACT DURING EUROPEAN PARABOLIC FLIGHT CAMPAIGNS WITH THE AIRBUS A300 ZERO G Vladimir Pletser, Sebastien Rouquette, Ulrike Friedrich, Jean-Francois Clervoy, Thierry Gharib, Frederic Gai and Christophe Mora |
| 10:20 – 10:40 | HYPOGRAVITY HUMAN PHYSIOLOGY RESEARCH AND EDUCATIONAL PARABOLIC FLIGHT ACTIVITIES IN BARCELONA: A NEW HUB OF INNOVATION IN EUROPE. Antoni Perez-Poch |
| 10:40 – 11:00 | Coffee break |
| 11:00 – 11:20 | UTILIZATION OF THE BREMEN DROP TOWER FOR PREPARING SPACE MISSIONS Thorben Könemann, Ulrich Kaczmarczik, Christian Eigenbrod, Peter von Kampen and Claus Lämmerzahl |
| 11:20-11:40 | THE SUBORBITAL RESEARCH ASSOCIATION: USING SUBORBITAL PLATFORMS FOR SCIENTIFIC AND STUDENT EXPERIMENTS Vladimir Pletser, Pierre-Francois Migeotte, Jean-Claude Legros, Bernard Deneyer and Rene Caron |
| 11:40-12:00 | CROFENIX SOUNDING ROCKET MISSION - STUDY OF LIQUID HYDROGEN UNDER LOW ACCELERATION, USING A NEW TOOL FOR MICROGRAVITY RESEARCH Christian Lockowandt, Mikael Lundin and Gunnar Andersson |
| 12:00-12:20 | THE PURDUE GREEN PROPELLANT SUBORBITAL TEST Steven Collicott |
| 12:20-12:40 | MGI – A SCALABLE MICRO GRAVITY INCUBATOR FOR IDENTICAL TREATMENT Carsten Haack, Adrian Koller and Marcel Egli |
| 12:40-13:10 | Comparison of Current and Future RLVs-based Flight Opportunities and Arete STEM Project Solution for Small CubeSat-like Payloads |
| 13:10-14:00 | LUNCH |

Thursday, October 1st **Parallel to “Facility”**
ROOM "...." Session Physical Science (Fluid Phys)

Chair: Ricard González-Cinca

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| 11:00 – 11:20 | DIELECTROPHORETIC FLOW CONTROL OF THERMAL CONVECTION IN CYLINDRICAL GAP: A PARABOLIC FLIGHT EXPERIMENT Christoph Egbers , Martin Meier, Robin Stoebel, Toni Schneiderei, Ion Borcia, Innocent Mutabazi, Antoine Meyer and Olivier Crumeyrole |
| 11:20 – 11:40 | LOW GRAVITY LIQUID JET COLLISION PATTERNS AT MODERATE WEBER NUMBERS Francesc Suñol and Ricard González-Cinca |
| 11:40 – 12:00 | CREEPING GAS FLOWS IN MICROGRAVITY EXPERIMENTS WITH NON-STATIONARY TEMPERATURE FIELDS AND MATTER SOURCES Daniyar Balapanov and Andrei Vedernikov |
| 12:00 – 12:20 | INVESTIGATIONS OF POROUS MEDIA PERMEABILITY AND FLUID DISPLACEMENT INSTABILITY Nickolay Smirnov , Valeriy Nikitin, Vladislav Dushin, Oleg Lofvinov and Eugenia Skryleva |
| 12:20 – 12:40 | HYPERGRAVITY EXPERIMENTS AT LARGE DIAMETER CENTRIFUGE WITH GLIDING ARC PLASMA Jiri Sperka , Lucia Potocnakova, Pavel Soucek, Petr Zikan, J.J.W.A. van Loon, Job Beckers, Gerrit Kroesen and Vit Kudrle (Student) |
| 13:00 – 14:00 | LUNCH |

Thursday, October 1st

ROOM V2 **Session Physical Science (Two-phase flows, Thermocapillary)**

Chair: Ichiro UENO

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| 14:00 – 14:20 | EFFECT OF SUBSTRATE TOPOGRAPHY ON THE THERMOCAPILLARY MIGRATION OF DROPLETS UNDER MICROGRAVITY Georgios Karapetsas, Nikolaos T. Chamakos and Athanasios G. Papathanasiou |
| 14:20 – 14:40 | COMPUTATION OF VAPOR BUBBLE GROWTH ON A SUPERHEATED SUBSTRATE IN MICROGRAVITY USING AN ASYMPTOTIC MODEL AT SMALL CONTACT ANGLES Alexey Rednikov, Marta Hernando Revilla, Nicolas Hollander and Pierre Colinet |
| 14:40 – 15:00 | NUMERICAL SIMULATIONS OF EVAPORATING ETHANOL SESSILE DROPLETS: CONTRIBUTION OF CONVECTIVE TRANSPORT F. Carle, S. Semenov, M. Medale, D. Brutin |
| 15:00 – 15:20 | CONVECTIVE THERMAL PATTERNS AND |

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| | EVAPORATION FLUX THROUGH AN EVAPORATING SURFACE: 3D SIMULATIONS Hatim Machrafi, Carlo Saverio Iorio and Pierre Dauby |
| 15:20 – 15:40 | NON - ISOTHERMAL SEPARATED GAS-LIQUID FLOWS IN MINI AND MICRO CHANNELS: THEORY AND EXPERIMENT Oleg Kabov, Yulia Kabova, Dmitry Zaitsev and Viacheslav Cheverda |
| 15:40 – 16:00 | MEASUREMENT OF SURFACE TENSION OF NANOFUIDS BY PENDANT DROP METHOD Carlo Iorio, Christophe Minetti, C. Gallo, K. Matondo, Frank Dubois |
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Thursday, October 1st

ROOM X Session Life Sciences (Physiology II)

Chair F Wuyts & C Leguy

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| 14:00 – 14:20 | IN VIVO ASSESSMENT OF PERIPHERAL VASCULAR RESPONSES UNDER ARTIFICIAL GRAVITY USING REMOTELY CONTROLLED ULTRASOUND TECHNIQUES. Carole Leguy , Benjamin Niederberger, Guido Petrat, Ruth Hemmersbach, Jörn Rittweger, Timo Frett |
| 14:20 – 14:40 | ON THE CARDIO-NEUROLOGICAL CHANGES GENERATED ON A HEALTHY ADULT MALE BY SHORT ABRUPT VARIATIONS OF THE GRAVITY LOAD X. Ruiz , N. Sáez, Jna. Gavalda, A. Perez-Poch |
| 14:40 – 15:00 | NEUROPLASTICITY INDUCED BY LONG-DURATION SPACEFLIGHT AND PARABOLIC FLIGHT: FIRST RESULTS OF THE ESA BRAIN-DTI PROJECT A. Van Ombergen , A. Demertzi, E. Tomilovskaya, B. Jeurissen, L. Litvinova, E. Pechenkova, A. Rumshiskaya, C. di Perri, E. Amico, I. Rukavishnikov, I.B. Kozlovskaya, V. Sinitsyn, J. Sijbers, V. Dousset, S.L. Laureys & F.L. Wuyts |
| 15:20 – 15:40 | GLUCOSE HOMEOSTASIS AND ADAPTIVE IMMUNITY DURING LONG-TERM CONFINEMENT: EVIDENCE FROM SIMULATED INTERPLANETARY MISSIONS TO MARS M. Ruscica , MA Masini, G. Vassilieva, I. Nichiporuk, I. Eberini, B. Morlotti, D. Santucci, Monica Monici, Astrid Parenti, F. Celotti, P. Magni, and F. Strollo. |
| 15:40 – 16:00 | FLOTATION AS A METHOD OF UNLOADING TO INDUCE STATURE ELONGATION ASSOCIATED WITH SPACEFLIGHT: EFFECT OF FOUR HOURS FLOTATION P. Carvil , J. G. Ríos Kristjánsson J. Attias, T. Russomano, D. A. Green |