PROGRAM of the WORKSHOP 2018 AMC$_{70}$

between Mathematics and Astronomy
a workshop in honor of Andrea Milani Comparetti
on the occasion of his 70th birthday

September 3

8:30 - 9:00 registration

9:00 - 9:10 opening

9:10 - 9:40 **R. Battiston:** *Precision Physics in space*

9:40 - 10:10 **S. Ferraz-Mello:** *Tidal synchronization of close-in terrestrial planets and planetary satellites*

10:10 - 10:30 **A. Lemaître:** *40 years of collaboration between Namur and Pisa*

COFFEE BREAK

11:00 - 11:30 **A. Morbidelli:** *Looking for very old, dispersed asteroid families*

11:30 - 12:00 **J. Laskar:** *Long term motion of the Solar System*

12:00 - 12:30 **D. Vokrouhlický:** *Young asteroid families: following AMC inspiration*

12:30 - 13:00 **D. Farnocchia:** *The trajectory of interstellar visitor 'Oumuamua*

LUNCH

14:30 - 15:00 **A. Celletti:** *Normal forms & KAM theory, space debris & the rotation of the Moon*

15:00 - 15:30 **R. Jedicke:** *The Panoramic Survey Telescope and Rapid Response System*

15:30 - 16:00 **R. Dvorak:** *On the Formation of Terrestrial Planets*

COFFEE BREAK

16:30 - 16:50 **Z. Knežević:** *50 papers with Andrea Milani (and counting)*

16:50 - 17:10 **G. B. Valsecchi:** *Comet encounters with the planets: an analytical approach*

17:10 - 17:30 **P. Di Lizia:** *Orbit determination of resident space objects with the multibeam radar sensor BIRALES*

17:30 - 17:50 **J. Perez:** *Isochrony in 3D radial potentials. From Michel Hénon ideas to isochrone relativity: classification, interpretation and applications*

September 4

8:50 - 9:20 **F. Spoto:** *Gaia DR2: the data release in which I have worked and AMC has not*

9:20 - 9:50 **A. Rossi:** *Space debris mitigation: history and perspectives*

9:50 - 10:20 **A. Cellino:** *Finding asteroid families with AMC*

10:20 - 10:40 **S. Cicalò:** *Radar-based Re-Entry Predictions with very limited tracking capabilities: the GOCE case study*

COFFEE BREAK

11:00 - 11:40 **A. Milani:** *Studying for 52 years: what can be learned from such a long experience*

11:40 - 12:00 **G. F. Gronchi:** *Playing with polynomials for the computation of orbits*

12:00 - 12:20 **S. R. Chesley:** *The Yarkovsky Effect Caught in the Act*

12:20 - 12:40 **R. Jehn:** *Andrea Milani and the Gretchen Question*

12:40 - 13:00 **S. Marò:** *Long term dynamics in mean motion resonances with crossing singularities*

LUNCH

14:30 - 15:00 **P. Tortora:** *Orbit determination and the Pioneer Anomaly: a long-range test of gravity in the Solar System*

15:00 - 15:30 **E. Perozzi:** *SSA & AMC: a history of acronyms*

15:30 - 16:00 **F. Bernardi:** *From NEODyS to SpaceDyS*

COFFEE BREAK

16:30 - 16:50 **P. Paolicchi:** *Age of asteroid families with the YORP-eye method*

16:50 - 17:10 **L. Cibin:** *The Fly-Eye telescope - the innovative optical technology for SSA*

17:10 - 17:30 **D. Lucchesi:** *A measurement of the Earth's Gravitomagnetic field in the centennial of the Lense-Thirring effect*

17:30 - 17:50 **G. Lari:** *Modeling the long-term dynamics of the Galilean satellites*

20:30 GALA DINNER

September 5

9:00 - 9:30 **K. Tsiganis:** *Dynamical excitation in the primordial asteroid belt*

9:30 - 10:00 **M. Vasile:** *Quantification of Epistemic Uncertainty in Orbital Mechanics*

10:00 - 10:20 **C. Gales:** *Dynamical effects of tesseral resonances in the LEO region*

10:20 - 10:40 **C. Colombo:** *Close encounter characterisation and deflection design for planetary protection and defence*

10:40 - 11:00 **J. L. Gonzalo Gomez:** *Collision avoidance manoeuvre design and application to passive deorbiting missions*

COFFEE BREAK

11:20 - 11:50 **M. Guzzo:** *Integrability of the restricted three-body problem near collisions*

11:50 - 12:10 **S. Barbieri:** *Sharp Nekhoroshev estimates for the three-body problem around a periodic torus*

12:10 - 12:30 **A. Fortunati:** *Perturbation methods and Liapunov functions*

12:30 - 12:50 **P. Di Cintio:** *Noise and discreteness effects and the Radial Orbit Instability in collisionless anisotropic spherical systems*

12:50 - 13:00 closing