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 Gravito-magnetic 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