



# Sixteenth Marcel Grossmann Meeting

## Tuesday, 6 July 2021

### Experimental Gravitation: Block 1 (09:30 - 12:30)

-Conveners: Angela D. V. Di Virgilio; Claus Laemmerzahl

time	[id] title	presenter
09:30	[252] A Man-Made Experiment Aimed to Clarify the Gravity Law in The Solar System	Dr VOROBYEVA, Alexandra
09:50	[806] A parallel plate approach to force metrology	SEDMIK, René
10:10	[840] Polarization rotation in geometric optics approximation and its subleading order correction	DAHAL, Pravin
10:30	[636] Measurement of the gravitational redshift effect using the satellite Spectr-R in the "RadioAstron" mission	BELONENKO, Aleksei
10:50	Break	
11:10	[782] Dark gravitomagnetism with LISA and gravitational waves space detectors	Prof. TARTAGLIA, Angelo
11:30	[998] qBounce: Ultra-cold neutrons bound by Earth's gravity field, a tabletop search for hypothetical gravity-like interactions	MICKO, Jakob
11:50	[364] Review of Tokamak Physics and GW conditions in relic conditions before $10^{-26}$ reduction in frequency with predictions as to what may be obtained in eLISA GW measurements from $10^{-4}$ Hz down to $10^{-16}$ Hz for eLISA	BECKWITH, Andrew
12:05	[275] Gravitomagnetic Field Generation using High Permittivity Materials in SMES Devices	STEPHENSON, Gary

# Thursday, 8 July 2021

## Experimental Gravitation: Block 2 (16:30 - 19:30)

-Conveners: Claus Laemmerzahl; Angela D. V. Di Virgilio

time	[id] title	presenter
16:30	[1024] Height measures in relativistic geodesy	PHILIPP, Dennis
16:50	[706] The SaToR-G experiment: testing metric and non-metric theories of gravity in the Earth's field via laser tracking to geodetic satellites	LUCCHESI, David Dr VISCO, Massimo
17:10	[777] Relativistic measurements with the Galileo Constellation: the Galileo for Science_2.0 (G4S_2.0) Project	LUCCHESI, David
17:30	[719] Large ring laser gyroscopes: geometry stabilization and control	Dr GIACOMELLI, Umberto
17:50	Break	
18:10	[933] The Ginger project - preliminary results	CARELLI, Giorgio
18:30	[429] Gravitational tidal forces bring Newton's equivalence principle to life in quantum mechanics	HAMMAD, Fayçal
18:50	[1021] Using Bose-Einstein Condensates as Gravitational Wave Detectors	ROBBINS, Matthew AFSHORDI, Niayesh JAMISON, Alan MANN, Robert
19:10	[630] How a Laser Physics Induced Kerr-Newman Black Hole Can Release Gravitational Waves without Igniting the Black Hole Bomb (Explosion of a Mini Black Hole in a Laboratory)	BECKWITH, Andrew