



### Session 1 - Solar Corona and Heliosphere: From Flares to CMEs and Interplanetary Shocks

- A catalogue of Forbush decreases recorded on the surface of Mars from 2012 until 2016: comparison with terrestrial FDs  
*A. Papaioannou, A. Belov, M. Abunina, J. Guo, A. Anastasiadis, R. Wimmer-Schweingruber, E. Eroshenko, A. Melkumyan, A. Abunin, B. Heber, K. Herbst, C.T. Steigies*
- Interplanetary Coronal Mass Ejections as the driver of non-recurrent Forbush Decreases  
*A. Belov, A. Papaioannou, M. Abunina, E. Eroshenko, A. Anastasiadis, S. Patsourakos, H. Mavromichalaki, A. Abunin*

### Session 6 - Unveiling Current Challenges in Space Weather Forecasting

- On the usage of Principal Components Analysis (PCA) for the Prediction of Solar Energetic Particle (SEP) events  
*A. Papaioannou, A. Anastasiadis, A. Kouloumvakos, M. Paassilta, R. Vainio, E. Valtonen, A. Belov, E. Eroshenko, M. Abunina, A. Abunin*
- Statistical validation of an empirical model of solar proton event time profiles  
*M. Paassilta, R. Vainio, A. Aran, A. Papaioannou, A. Anastasiadis, P. Jiggins, S. Aminalragia-Giamini*
- The Advanced Solar Particle Events Casting System (ASPECS) activity  
*A. Anastasiadis, A. Aran, R. Vainio, I. Sandberg, M. Dierckxsens, P. Jiggins, A. Papaioannou, M.K. Georgoulis, E. Paouris, G. Balasis, O. Giannakis, G. Vasalos, M. Paassilta, S. Aminalragia-Giamini, A. Tsigkanos*
- Forecasting the Strength of Geomagnetic Storms utilizing CME-ICME characteristics  
*E. Paouris, A. Papaioannou, A. Anastasiadis, G. Balasis*

### Session 7 - Radiation Environments: From Solar Origin to Effects on Space Missions

- Characterization of the L2 radiation environment using ESA SREM measurements  
*S. Aminalragia-Giamini, S. Raptis, I. Sandberg, A. Anastasiadis, C. Papadimitriou, I. A. Daglis, P. Nieminen*
- Solar and interplanetary sources of Solar Energetic Particle (SEP) Events during 1988-2013. Implications for SEP forecasting  
*A. Papaioannou, E. Paouris, A. Anastasiadis, A. Aran, R. Vainio, M. Paassilta, P. Jiggins*