

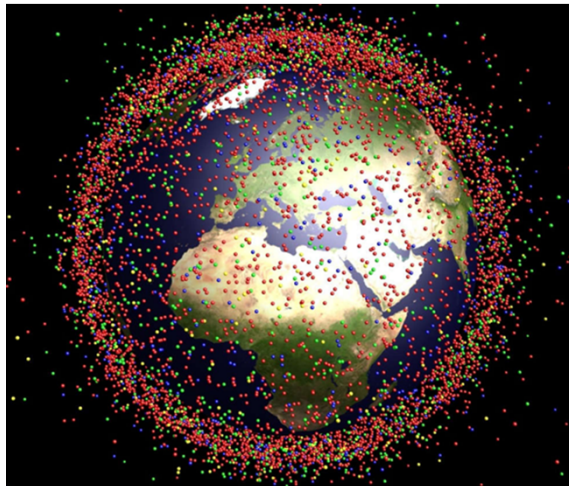
# Physikalisches Kolloquium

## Begrüßung der Master-Studierenden

Di 22.10.19  
15:15 Uhr  
14:45 Uhr, Kaffee/Tee  
R 513  
mit anschließendem Umtrunk



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## Space Debris

Many technologies, on which our daily life relies on, are satellite based, e.g. GPS, weather forecast, satellite TV, and communication. In total 1700 active satellites provide many different services. For the next years a strong increase in the number of satellites is expected including large satellite constellations. Beside the active satellites 28000 space debris objects larger than 10 cm orbit in space. These objects pose a threat to operational satellites and can lead to a cascading effect, the so-called Kessler syndrome. At the German Aerospace Center (DLR) we develop techniques to track space debris precisely with laser technologies. In the future high power lasers can provide the possibility to modify the trajectory of space debris for collision avoidance through photon pressure or even remove space debris through laser ablation processes.