

ulm university universität

Physikalisches Kolloquium Physics Colloquium Einladung

Invitation

Monday, 08 February 2021

Format: Online via Webex, at 16:15

Going to space is very challenging!

Prof. Dr. Floris Wuyts

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Selfie with German astronaut Alexander Gerst and PhD student Steven Jillings.

Going to space is very challenging. Not only to achieve the sufficient escape velocity, but also for the human body to deal with prolonged weightlessness. For decades, many physiological systems have been studied among space crew like the neurovestibular system, causing e.g. space motion sickness. Or the cardiovascular deconditioning, bone loss and muscle atrophy causing weakness upon return to earth. The brain however was only very recently discovered, so to say. My talk will cover how sustained microgravity affects the human brain and the vestibular system, and which physical methods are used to investigate these highly interesting systems. I will bring new findings on neuroplasticity. And several stories too, having tested 71% of all Russian Cosmonauts that went to the ISS :-).



French astronaut Thomas Pesquet who holds an uploaded picture with our DTI analysis of his brain.