

IAF ASTRODYNAMICS SYMPOSIUM (C1)
Guidance, Navigation & Control (1) (5)

Author: Prof. Eberhard Gill
Delft University of Technology, The Netherlands, E.K.A.Gill@tudelft.nl

KEYNOTE: HOW TO SENSE GRAVITY?

Abstract

What has Newton's apple to do with a hydrogen atom falling into a black hole? What does a rotating massive body do to the space-time surrounding it? How can you really measure the tiny distortions of space-time and separate them from fictitious effects arising from rigorous application of fundamental theory? What are present-days satellite missions contributing to characterize the Earth's gravity field and which future challenges and developments does satellite technology hold to sense gravity?

The Breakwell lecture will try to answer these questions based on the author's fascination and examination with the phenomenon of gravity and the ways how to sense, measure and characterize it.