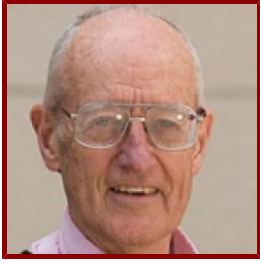


# Stanford

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## Daniel DeBra

Edward C. Wells Professor of Engineering, Emeritus  
Aeronautics and Astronautics

### CONTACT INFORMATION

- **Administrator**

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### Bio

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#### BIO

Professor DeBra collaborates with Stanford physicists on three projects: Gravity Probe-B (GP-B), Space Test of the Equivalence Principle (STEP), and the vibration isolation of a gravity-wave antenna (LIGO). These involve satellite control of attitude and translation and the development of instruments of extraordinary precision and accuracy. In GP-B gyroscopes were successfully orbited in 2004. They have been compared to stars to an accuracy approaching a nanoradian. In STEP the orbital performance promises improvements of a million in testing the equivalence of inertial and gravitational mass. (It is currently in a hiatus of funding.) Professor DeBra's interests in precision engineering extend to manufacturing where his students' work developing "quiet hydraulics" in the 1990s has more recently been applied to the vibration isolation of the optical systems of LIGO.

#### ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Aeronautics and Astronautics

#### HONORS AND AWARDS

- Member, National Academy of Engineering

#### PROFESSIONAL EDUCATION

- PhD, Stanford University (1962)