

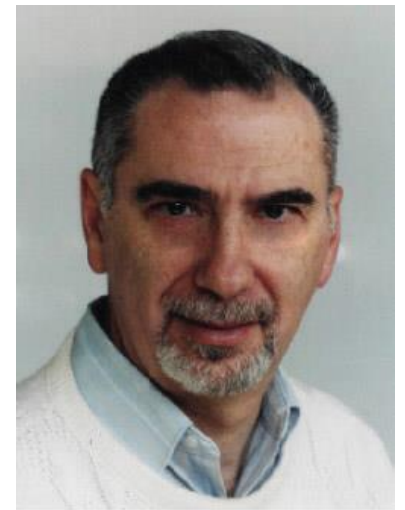
报告人: Yehuda B. Band 教授

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New York University—Shanghai

时间: 4月11日 (周三) 下午2:30-3:30

地点: 南校区第一实验楼423会议室



Dynamics of a Magnetic Needle Magnetometer: Sensitivity to Landau-Lifshitz-Gilbert Damping

磁针磁力计动力学:

对Landau-Lifshitz-Gilbert Damping阻尼的敏感性

The dynamics of a single-domain magnetic needle, which can be used as a high precision magnetometer, are analyzed. The uncertainty of the magnetometer due to Gilbert dissipation and the associated internal B field fluctuations is determined. We also consider needle dynamics in an inhomogeneous magnetic field (e.g., a Ioffe-Pritchard trap) and discuss magnetic levitation, and treat external noise effects.

报告人简介:

Yehuda B. Band, 1968年本科毕业于The Cooper Union for the Advancement of Science and Art, 1970年获得University of Chicago硕士学位, 1973年获得University of Chicago博士学位。获聘为Ben Gurion University 化学系、物理系及光电系教授, 并加入Ilse Katz Institute for Nanoscale Science and Technology。现已加入 New York University—Shanghai, 曾加入过Argonne National Laboratory、Allied-Signal Inc.、National Institute for Standards and Technology (NIST)、University of Chicago、Harvard-Smithsonian Center for Astrophysics、Harvard University, 及University of California—Berkeley。主要研究领域包括碰撞理论、光散射、非线性光学、光电、量子光学、激光物理及化学等。荣获美国物理学会会士, The Barecha Fund Fellowship for Outstanding Young Scientists (1978), The Allied-Signal Inventor Award (1988), The Japanese Society for the Promotion of Science Fellowship (1997), The BGU Rector's Prize for Excellence in Research (2006)。发表论文250余篇 (包括Nature1篇, PRL16篇), 拥有多项专利, 出版书籍2本。