



Wiedner Hauptstraße 8-10/E134, 1040 Wien/Vienna, Austria - Tel: +43 1 58801 13401 / Fax: +43 1 58801 13499 - E-mail: office@iap.tuwien.ac.at / http://www.iap.tuwien.ac.at

IAP-SEMINAR

ANNOUNCEMENT

Date: **Tuesday**, **5.4.2016**

Time: **16:00 p.m.**

Location: Technische Universität Wien, Institut für Angewandte Physik, E134

yellow tower "B", 5th floor, Sem.R. DB gelb 05 B (room number

DB05L03), 1040 Wien, Wiedner Hauptstraße 8-10

Lecturer: Paul S. Weiss

California NanoSystems Institute and Departments of Chemistry & Biochemistry and Materials Science & Engineering, UCLA, Los

Angeles/CA

Subject: Atomically Precise Nanoscale Contacts

Abstract: The physical, electronic, mechanical, and chemical connections that

materials make to one another and to the outside world are critical. Just as the properties and applications of conventional semiconductor devices depend on these contacts, so do nanomaterials, many nanoscale measurements, and devices of the future. We discuss the important roles that these contacts can play in preserving key transport and other properties. Initial nanoscale connections and measurements guide the path to future opportunities and challenges ahead. Band alignment and minimally disruptive connections are both targets and can

be characterized in both experiment and theory.

I discuss our initial forays into this area in a number of materials

systems.

All interested colleagues are welcome to this seminar lecture (45 minutes presentation followed by discussion).

U. Diebold e.h. (Seminar-Chairperson)

H. Störi e.h. (LVA-Leiter)