

סמינר מחקר

יום ב', 8/12/14 שעה 18:00 בנין גילמן, חדר 449

Hasok Chang

Cambridge University

Reductionism and the Relationship between Physics and Chemistry

Commentator: Silvan S. Schweber (Harvard U./Brandeis U.)

Chair: Yossef Schwartz

התכנסות לקפה וכיבוד קל בשעה 17:45, ליד חדר 449

The relationship between physics and chemistry is one of the perennial questions concerning reductionism. Chemistry is the most immediate territory that physics must conquer if its “imperialistic” claim to be the foundation for all sciences is to have any promise. I wish to enhance the anti-reductionist position concerning the chemistry-physics relation, with three arguments inspired by some leading 20th-century chemists. (1) The very foundation of quantum chemistry is classical, and its roots go back to the organic structural chemistry of the 1860s. (2) Chemists exploit for their own purposes the conceptual resources provided by physics. (3) Even physics itself is much more disunified than it may seem, constituting a dubious basis for reduction. I will also suggest that a careful consideration of the physics-chemistry relation points to some productive ways to reframe the reductionism debate.

הציבור מוזמן

<http://humanities.tau.ac.il/cohn/>