

That's Not Physics!

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Abstract: Have you ever left a colloquium or a seminar and thought to yourself "that was interesting, but it wasn't physics"? If so, you are in good company, because there has long been disagreement in our community about which research specialties belong to the canon of physics and which do not, particularly when it comes to hiring faculty members into physics departments to train PhD students. In this talk, I discuss some aspects of this debate from the founding of the American Physical Society to the present day. Examples include a field that was once a part of physics but is not anymore; a field that was once "not physics" but is definitely so today; and a field whose status as "physics" remains unsettled in the minds of many.

Bio: Prof. Zangwill earned his B.S. in Physics from Carnegie Mellon University in 1976 and his Ph.D. from University of Pennsylvania in 1981, where he introduced the time-dependent density functional method. After positions at Brookhaven National Laboratory and the Polytechnic Institute of Brooklyn, he joined Georgia Institute of Technology. He was elected a Fellow of the American Physical Society in 1997 for his theoretical contributions to epitaxial crystal growth. He is also the author of the monograph PHYSICS AT SURFACES, the Jackson-busting graduate-level textbook MODERN ELECTRODYNAMICS, and the biography A MIND OVER MATTER: PHILIP ANDERSON AND THE PHYSICS OF THE VERY MANY.