

Abstract Submitted  
for the MAR11 Meeting of  
The American Physical Society

**The Golden Age of Radio: Solid State's Debt to the Rad Lab<sup>1</sup>**

JOSEPH D. MARTIN, University of Minnesota — While MIT's Radiation Laboratory is rightly celebrated for its contributions to World War II radar research, its legacy extended beyond the war. The Rad Lab provided a model for interdisciplinary collaboration that continued to influence research at MIT in the post-war decades. The Rad Lab's institutional legacy—MIT's interdepartmental laboratories—drove the Institute's postwar research agenda. This talk examines how solid state physics research at MIT was shaped by a laboratory structure that encouraged cross-disciplinary collaboration. As the sub-discipline of solid state physics emerged through the late-1940s and 1950s, MIT was unique among universities in its laboratory structure, made possible by a large degree of government and military funding. Nonetheless, the manner in which MIT research groups from physics, chemistry, engineering, and metallurgy interfaced through the medium of solid state physics exemplified how the discipline of solid state physics came to be structured in the rest of the country. Through examining the Rad Lab's institutional legacy, I argue that World War II radar research, by establishing precedent for a particular mode of interdisciplinary collaboration, shaped the future structure of solid state research in the United States.

<sup>1</sup>Research supported by a grant-in-aid from the Friends of the Center for the History of Physics, American Institute of Physics.

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Date submitted: 06 Dec 2010

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