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Between Industry and Academia: A Physicist's Experiences at The Aerospace Corporation

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The Aerospace Corporation is a nonprofit company whose purposes are exclusively scientific: to provide research, development, and advisory services for space programs that serve the national interest, primarily the Air Force's Space and Missile Systems Center and the National Reconnaissance Office. The corporation's laboratory has a staff of about 150 scientists who conduct research in fields ranging from Space Sciences to Material Sciences and from Analytical Chemistry to Atomic Physics. As a consequence, Aerospace stands midway between an industrial research laboratory, focused on product development, and academic/national laboratories focused on basic science. Drawing from Dr. Camparo's personal experiences, the presentation will discuss advantages and disadvantages of a career at Aerospace, including the role of publishing in peer-reviewed journals and the impact of work on family life. Additionally, the presentation will consider the balance between basic physics, applied physics, and engineering in the work at Aerospace. Since joining Aerospace in 1981, Dr. Camparo has worked as an atomic physicist specializing in the area of atomic clocks, and has had the opportunity to experiment and publish on a broad range of research topics including: the stochastic-field/atom interaction, radiation effects on semiconductor materials, and stellar scintillation.