"DAVID VANDERBILT@60, AND HIS INFLUENCE ON RECENT THEORIES OF ELECTRON-PHONON INTERACTIONS AND SUPERCONDUCTIVITY"

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At this 2015 Electronic Structure/Computational Materials Physics Workshop here in Trieste, it is a great pleasure for me to contribute to the sessions in honor of the 60th birthdays of David Vanderbilt and Stefano Baroni. Roberto Car will discuss the career of Stefano Baroni, and I will describe some of David Vanderbilt's contributions to condensed matter physics. In particular, I will focus on David's creative use of Wannier functions which has had a big impact. I'll discuss how this new emphasis on Wannier functions led to important advances related to studies of electron-phonon interactions and superconductivity.