

Abstract Submitted
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Chasing the Electron: A sophomore's guide to the math you'll need to reach the Schrodinger Equation BENJAMIN GRUEY, Santa Rosa Junior College — After a brief introduction to orbitals and the concept of electron density in freshman chemistry, I became fascinated with Schrodinger's Wave Equation (SE). Although I am only a sophomore in lower division math and physics courses, I am pursuing independent study with a math professor at SRJC in pursuit of SE. I am taking my education beyond elementary ordinary differential equations so I can become acquainted with tackling the full time-dependent SE, which includes partial differential equations, Fourier analysis and Hamiltonian Mechanics. In my talk I will outline my plan of independent study in pursuit of SE, and will broaden my outline to explain how I decided on which courses I needed. My parents always told me school was about learning how to learn, and this is one step in crafting my post-education education.

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