Abstract Submitted
for the APR20 Meeting of
The American Physical Society

Making Quantum Mechanics Visual and Interactive with Physlet and Open Source Physics Curricular Material MARIO BELLONI, WOLFGANG CHRISTIAN, Davidson College — The teaching of quantum mechanics has remained relatively unchanged since its inception, despite recent work assessing and improving the conceptual understanding of students. Students, therefore, often see quantum mechanics in terms of misleading or incomplete visualizations, as one dimensional and time independent, and devoid of almost any connection with classical physics. To address these issues, we have produced and class-tested interactive Physlet- and Open Source Physics-based curricular materials in support of introductory, intermediate, and advanced courses in quantum mechanics. These exercises address both quantitative and conceptual difficulties encountered by many students. Because the materials are Web based and extremely flexible, these exercises are appropriate for use with a variety of pedagogies such as Just-in-Time Teaching. Examples of the curricular materials will be discussed. Additional information can be found at https://www.compadre.org/pqp/.

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Date submitted: 09 Jan 2020 Electronic form version 1.4