

# Adaptive Finite Volume Approximations of Eigenvalue Problems with Applications

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**Abstract:** In this presentation, we will talk about some adaptive finite volume approach to elliptic eigenvalue problems and its applications to electronic structure calculations. We will report several numerical experiments in materials science, which show that our approach is efficient. This talk is based on some joint works with X. Dai, X. Gong, Z. Yang, and D. Zhang.

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