

LIFTING NON-ORDINARY COHOMOLOGY CLASSES FOR SL_3

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Abstract: In this paper, we present a generalisation of a theorem of David and Rob Pollack. In [PP], they give a very general argument for lifting ordinary eigenclasses (with respect to a suitable operator) in the group cohomology of certain arithmetic groups. With slightly tighter conditions, we prove the same result for non-ordinary classes. Pollack and Pollack apply their results to the case of p -ordinary classes in the group cohomology of congruence subgroups for SL_3 , constructing explicit overconvergent classes in this setting. As an application of our results, we give an extension of their results to the case of non-critical slope classes in the same setting.

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