

Deformations of Galois representations associated to degenerate extensions

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Abstract. Boston and Mazur studied the deformation theory of certain S_3 -extensions of the rational number field, determining some of the natural subspaces of the deformation space. I will show how to extend their work by removing the hypothesis that the extension under consideration is “generic”. Further, I will remove some other hypotheses of theirs that appear to force all extensions of their type to be generic and give some examples of degenerate extensions.

