

Title : On the structure of Selmer groups of  $\Lambda$ -adic deformations over  $p$ -adic Lie extensions.

Abstract : We shall consider the  $\Lambda$ -adic deformations of Galois representations associated to elliptic curves and show that the Pontryagin dual of the Selmer group of a  $\Lambda$ -adic deformation over certain  $p$ -adic Lie extension has no non-trivial pseudo-null submodule. We shall also discuss various arithmetic Iwasawa modules associated to such deformations. This is a joint work with R. Sujatha.