

SPECTRAL SEQUENCES FOR SEMIABELIAN VARIETIES OVER NON-CLOSED FIELDS

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This is joint work with Alexander Petrov. Using an explicit description of the first potentially non-zero differential of the Hochschild-Serre spectral sequence for a semiabelian variety, we present an example where this differential is non-zero. This gives an abelian surface over \mathbb{Q} which is not a direct factor of a product of Jacobians of curves with rational points. Other applications include a formula for the Brauer group of a torus, and a complete description of the Hochschild-Serre spectral sequence for a smooth projective curve.