# 30/11/2018

# InterCity - seminar

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# Bern - Fribourg/Freiburg -**Neuchâtel**

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-	Time	Speaker	Talk
	14:00	Roberto Pagaria (SNS Pisa)	The cohomology ring of configuration spaces of elliptic curves
The state of the			Abstract: Understanding the configuration spaces of unordered points in a variety is a hard and long-studied problem. We focus on the case where the variety is the two dimensional torus, i.e. an elliptic curve. In this talk I will present the cohomology algebra with rational coefficients of this configuration space. The techniques used in the proof involve the Leray spectral sequence, mixed Hodge structures, representation theory, and previous calculations of Betti numbers.
	15:30	Javier A. Carvajal-Rojas (EPFL)	The USTP problem and diagonal F-regularity
			<b>Abstract:</b> A trending problem in commutative algebra is to determine for what rings R there exists a positive integer h=h(R) such that P <sup>(nh)</sup> is contained in P <sup>n</sup> for all primes ideals P of R. If so, one says that R has the uniform symbolic topology property (USTP). In this talk, we survey the current progress in this problem and we introduce a new class of F-singularities for which USTP holds effectively, namely, diagonally F-regular singularities. This is joint work with Daniel Smolkin.

The talks will take place in Room B217 Institut de mathématiques (Rue Emile Argand 11) of the Université de Neuchâtel.

### For further informations please contact the organisers:

Emanuele Delucchi (Fribourg) – Jan Draisma (Bern) – Elisa Gorla (Neuchâtel)