Large eigenvalues of the spectrum and concentration of the metric. (Joint work with A. Savo)

In this talk, I will explain that the presence of a large gap in the spectrum of the Laplacian acting on functions or on p-forms implies some concentration phenomena. The first part of the talk will consist in examples, in order to recall and compare classical results on the subject. In the second part, I will state our main theorem in the context of mm-spaces, with applications to the spectrum of functions and more generally to the spectrum of Laplace-type operators.

Bruno Colbois (Neuchâtel)