

Oberseminar Geometrie	THURSDAY 2nd May 2013
Department of Mathematics	14:00-15:40
University of Fribourg	Seminar room 0.102, Mathematics building

[Please note that the time and venue are different from the usual ones.]

SARA MALONI (Paris-Sud 11, Orsay)

‘Gluing constructions and slices of Quasifuchsian space.’

Given a surface Σ , Kra’s plumbing construction endows Σ with a projective structure for which the associated holonomy representation ρ depends on the ‘plumbing parameters’ $\mu_i \in \mathbb{C}$. This construction gives elements of the Maskit slice, a well-known slice of the boundary of the Quasifuchsian space $\mathcal{QF}(\Sigma)$.

In the first part of the talk we will review the notion of Kleinian groups, of Dehn–Thurston coordinates for simple closed curves, of complex projective structures, of pleated surfaces and of Maskit slices. In the second part we will describe the plumbing construction and a more general plumbing construction, called the \underline{c} -plumbing construction, which builds elements in a particular slice of the Quasifuchsian space $\mathcal{QF}(\Sigma)$. Time permitting, we will describe some properties of these slices and we will show some pictures.