| **Oberseminar Geometrie** | **Wednesday 12th December 2012** |
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| Department of Mathematics | **10:20–12:00** |
| University of Fribourg | Seminar room, Math. II (Lonza) |

Lionel Pournin (Paris)

## 'Recent results on flip-graphs.'

*Consider a triangulation $T$ of a point configuration $\mathcal{A}$ in some Euclidean space. A flip is a local operation that transforms $T$ into another triangulation of $\mathcal{A}$. The flip graph of $\mathcal{A}$ is the graph whose vertices are the triangulations of $\mathcal{A}$ and whose edges correspond to flips.*

*Several questions about flip-graphs remain open, such as its connectedness when $\mathcal{A}$ has dimension $3$ and $4$, or the diameter of some of its connected subgraphs. Among such connected subgraphs, one finds in particular the $1$-skeletons of secondary polytopes.*

*Recent results on flip-graphs will be reviewed in this talk. In particular, the recently announced proof that the flip-graph of a polygon with $n$ vertices has diameter $2n-10$ when $n$ is greater than $12$ will be sketched.*