Séminaire de géométrie algébrique de Rennes<sup>1</sup>

Exposé du jeudi 12 novembre 2015

## COMPATIBLE TRIANGULATIONS AND RIEMANN-HURWITZ FORMULA FOR FINITE MORPHISMS OF *p*-ADIC CURVES

VELIBOR BOJKOVIC (BORDEAUX ET PADOUE)

**Résumé :** For a finite morphisms  $f: Y \to X$  of quasi-smooth, connected k-affinoid curves where k is an algebraically closed, complete non-archimedean field, one is interested to find a Riemann-Hurwitz formula relating the Euler-Poincare characteristics of Y and X (computed with respect to a suitable cohomology). A better understanding of such a formula leads to an introduction of the notion of strictly f-compatible triangulations of Y and X, which is closely related to the stability of the map f.

In this talk we will sketch a simple proof of existence of stricly f-compatible triangulations which is a slight amelioration of Coleman's theorem on stable maps. Furthermore we will state and prove Riemann-Hurwitz formula for the morphism f above, and if time permits, we will mention some future applications to p-adic Index theorem.

<sup>1.</sup> Les jeudis matin, de 10 h30à 11 h30, salle 004, IRMAR (bâtiment 22), Université de Rennes 1, Campus de Beaulieu