

Analytic view towards semistable reduction

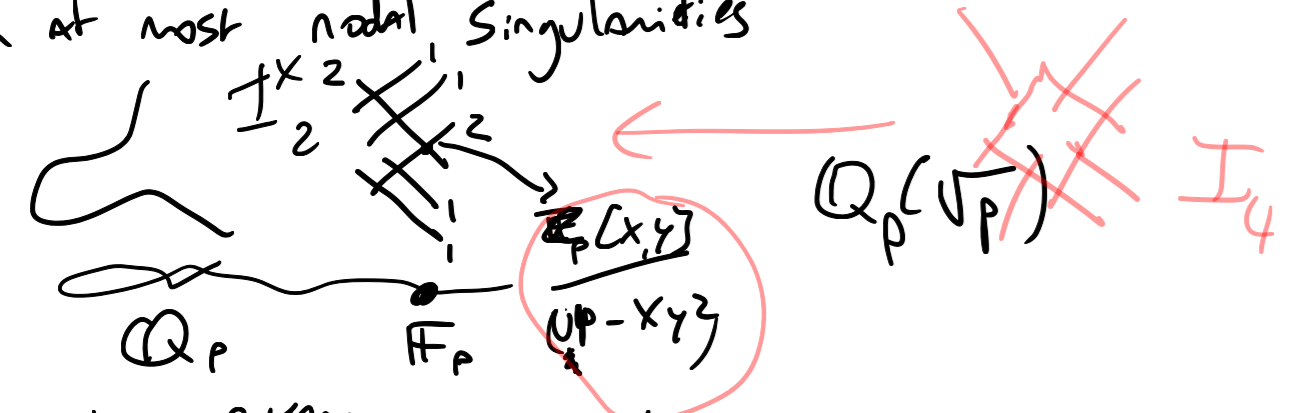
K NA discrete valued
 K° ring of ints
 \tilde{K} residue char p
 $\hookrightarrow \tilde{K}^a$

C/K nice curve $g \geq 1$
 model = proper relative curve \tilde{C}/K°
 generic fiber C

good red: smooth model exists

semistable red: \exists regular model

w/ reduced special fiber with at most nodal singularities



SS red thm: every curve is pnt. semistable

Note that a SS model has normal crossing

Prop: if C has SS reduction then the minimal NC model is semistable

Remarks, char 0: computation

- $D \times M$: Analogous statement for ab. vars
- AW: study $\text{pic}(C_s)$
- Saito: ℓ -adic proof

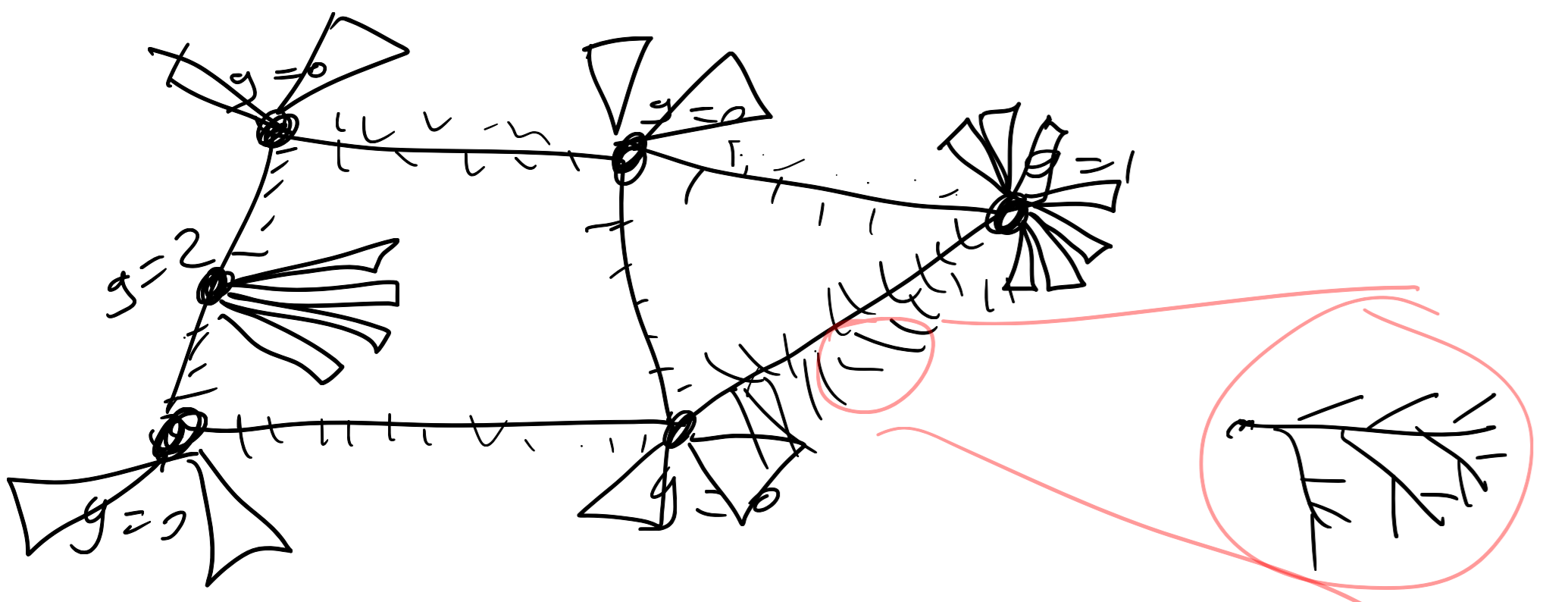
• Non-Archimedean:

• $BL \rightarrow$ DUCROS

• Vondra, Tenkai, ARZDRAF-WEVENS

Step 1 Reduce to an Analogous Statement for K alg closed

Step 2 Can infinite red tree



branches at a genus g point are parametrised by the closed pts of a