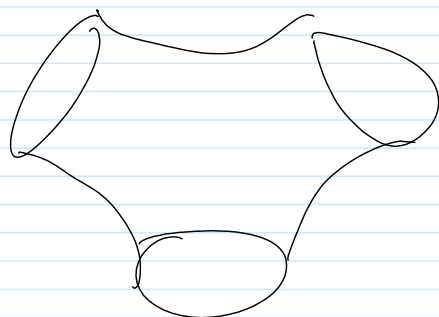
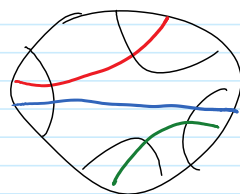


# Kapovitch's class, Wed Feb 11: Rafi on boundary structures in 3D

February-11-15 11:07 AM

Last time (Jan 28):  
 $F_2$  acting on  $H^2$



$M$ : compact 3-manifold (as above)

$AH(M)$ : Hyperbolic structures on  $M$

$\cup$

$CC(M)$  convex-cocompact structures:

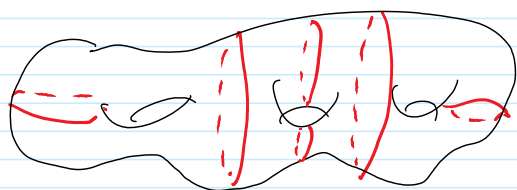
$M$  has a compact-convex submanifold  $C$  s.t.  $i: C \rightarrow M$  is homotopy equivalence.

$S$ : surface of finite type

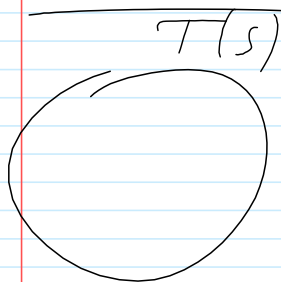
$T(S)$ : Teichmüller space: =

$$\left\{ \begin{array}{l} \text{Free, faithful, co-compact} \\ \text{free, faithful, co-compact} \end{array} \right\} / \text{conjugation}$$

$\cong \mathbb{R}^{6g-6}$  coordinates are the lengths below.



(why  $\times 2$ ?)



$$M, \partial M = \sum_1 \cup \dots \cup \sum_k$$

$$\Phi: CC(M) \rightarrow T(\Sigma_1) \times \dots \times T(\Sigma_k)$$

Thm (Bers, simultaneous uniformization):

$\Phi$  is a homeomorphism.