

Hello!

Marie Abadie, Univ. of Luxembourg.

chaotic dynamical system

A symp. rigid mapping class group

Teichmüller space

Weil Peterson

Hexagons graph

Mountains

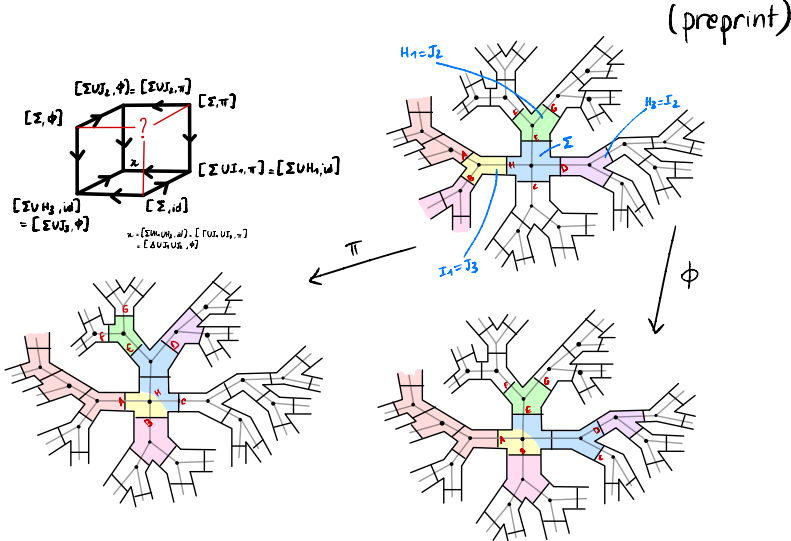
read comics in libraries

SPORT

knitting

hike and ski

CAT(0) cube complexes and asymptotically rigid mapping class groups



Geometry of Teichmuller spaces and Moduli spaces

Hexagon and flip graphs		Laminations
Isospectral surfaces		Shearing coordinates
Length spectrum		Lines of minima
		Weil-Peterson metric

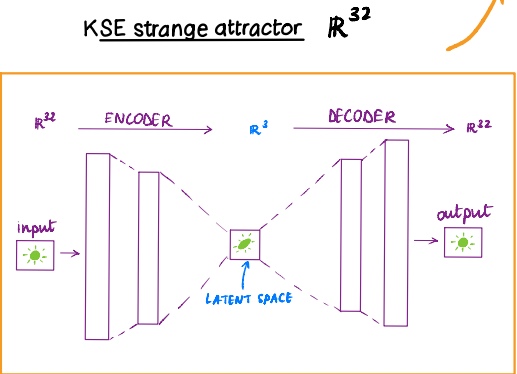
Can topology help us understanding chaotic PDE?
 (preprint soon ^{hopefully} with P. Beck, J. Parker, T. Schneider, ECPS laboratory EPFL)

$$''\mathcal{P} = \sum_i w_i \mathcal{P}_i''$$

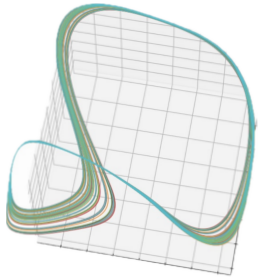
$i \in \text{POs.}$

can we enumerate periodic orbits? + generating set

Strange attractor from PDE (high dimensional)



Finite set of periodic orbits + their Lk number



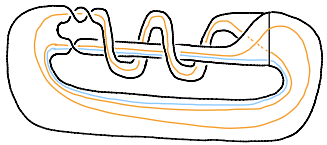
KSE strange attractor in the 3D-latent space

Birman-William theorem

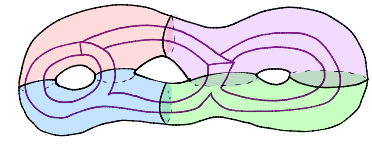
Solve $\begin{cases} Lk(a,b) = P_i(t_{ij}) + P_j(l_{ij}) \\ = \sum_j R_{ij}(a,b) \end{cases}$ [Gilmore]

Template (t_{ij}, l_{ij})
 Symbolic names for the orbits in the input set

BRANCHED SURFACE + FLOW



Template for the KSE system



??