Contribution Title:	CLASSCAL MOTION IN RANDOM POTENTALS
Authors:	Ch. Schumacher
Presenting author:	Schumacher Ch.
Affilation:	Universitaet Erlangen-Nuernberg
E-mail:	schumacher@mi.uni-erlangen.de
Invited speaker:	
YRS seminar:	NO

The classical motion in two dimensions generated by a Hamiltionian function with random potential with Coulomb singularities is intimately connected with the motion on a negatively curved Riemannian surface of infinite genus and exhibits a lot of parallels with chaotic billiards. In this talk I indicate how to construct a geometric Markov partition in the spirit of C. Series and how this can be used to show diffusive behaviour and ergodicity of the Hamiltonian flow restricted to an energy.