

HYDROGEN TYPE STABILITY PROBLEMS ON NON  
PARABOLIC MANIFOLDS

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I will explain how classical results on the stability of Hydrogen type atoms can be extended to certain abstract Riemannian 3-manifolds. This clarifies which geometric and topological properties of the Euclidean space are actually needed to formulate and prove such stability results. The role of path integral formulae for the underlying Schrödinger semigroups will also be discussed in this context.