

# Pauli operators with almost periodic electromagnetic fields

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**Abstract:** I will consider a two-dimensional Pauli operator  $H$  with an almost periodic electromagnetic field. First, I will discuss the general ergodic properties of  $H$ . Further, assuming that the electric potential vanishes, I will discuss the zero modes of  $H$ . A special attention will be allocated to the case of a vanishing mean value of the magnetic field.

The talk is based on a joint work with J.-F. Bony (Bordeaux) and N. Espinoza (Tokyo).