

Abstract Submitted  
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**Spin-orbit coupling in quasiperiodic systems** CARLOS WEXLER,  
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sity of Tokyo — Electrons in incommensurate systems (e.g., electrons in a lattice  
in presence of a perpendicular magnetic field) have a rich behavior exemplified by  
the beautiful Hofstadter butterfly, a self-similar spectrum which is a multifractal  
Cantor set. We analyze the effect of spin-orbit coupling in this system which can  
be described by a generalization of Harper's equation. We find that the added term  
significantly modifies the scaling laws and appears to induce a delocalization of the  
insulator.

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