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Sommario/riassunto

This book concentrates mainly on the theorem of existence of periodic orbits for higher dimensional analogs of Twist maps. The setting is that of a discrete variational calculus and the techniques involve Conley-Zehnder-Morse Theory. They give rise to the concept of ghost tori which are of interest in the dimension 2 case (ghost circles). The debate is oriented somewhat toward the open problem of finding orbits of all (in particular, irrational) rotation vectors.
Contents:

- Twist Maps of the Annulus
- The Aubry-Mather Theorem
- Ghost Circles
- Symplectic Tw