

**Abstract for IAS Focused Program on Mathematical Foundations of Topological Materials  
(January 6-9, 2026)**

**Periodically Driven Systems and the Bott Map in K-theory**

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We revisit Floquet topological phases, which arise from the unitary dynamics generated by a periodically driven Hamiltonian. Our emphasis will be on the connection between bulk and boundary invariants of Floquet systems with the Bott isomorphism, spectral flow and other fundamental properties of complex and real K-theory of topological spaces/operator algebras. We will consider these properties in case of systems without symmetry, chiral symmetry and particle-hole symmetry (topological superconductors).