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McMaster University, Hamilton, Ontario L8S 4K1, Canada. *Birkhoff normal forms and scattering
for the NLS on R^d* . Preliminary report.

Hamiltonian systems are subjected to normal forms transformations in order to remove nonresonant terms from the equations of motion. For Hamiltonian PDE posed on the torus T^d this has proved useful for KAM theory, and for the purpose of understanding the long time behavior of solutions. However when considered on all of R^d there is the possibility that all of the resonant terms can be removed as well. I will discuss a circle of ideas to this effect. This represents work in progress with Y. Wang and A. Selvitella. (Received September 18, 2011)