

Low dimensional Liouville tori in integrable systems.

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The talk will be focused on Calogero-Moser type systems. It will be demonstrated that such integrable Hamiltonian systems can have Liouville tori of dimension less than half of the dimension of the phase space. These are examples of a more general phenomenon of stratified integrable systems. That is the phase space of the system can be stratified, or the base of the Lagrangian projection can be stratified or both. A similar phenomenon takes place for superintegrable systems.