1120-53-147 **Richard Hind***, Department of Mathematics, University of Notre Dame, Notre Dame, IN 46556. *Optimal embeddings of Lagrangian tori.*

We investigate when there exists a Hamiltonian diffeomorphism of \mathbb{R}^4 taking a given Lagrangian torus into a ball.

To be precise, we define the product torus

$$L(a,b) = \{\pi(x_1^2 + y_1^2) = a, \pi(x_2^2 + y_2^2) = b\}$$

and compute the infimum of R > 0 such that there exists a Hamiltonian diffeomorphism mapping L(a, b) into a ball of capacity R.

This is joint work with Emmanuel Opshtein, and our analysis relies on a classification result of Georgios Dimitroglou Rizell. (Received February 19, 2016)