ID de Contribution: **18** Type: **Non spécifié**

Symplectically knotted cubes

vendredi 2 juillet 2021 15:15 (1 heure)

While by a result of McDuff the space of symplectic embeddings of a closed 4-ball into an open 4-ball is connected,
the situation for embeddings of cubes □4=□2×□2 is very different. For instance, for the open ball □4 of capacity 1, there exists an explicit decreasing sequence □1,□2,⋯⟶1/3 such that for □<□□ there are at least □ symplectic embeddings of the closed cube □4(□) of capacity □ into □4 that are not isotopic. Furthermore, there are infinitely many non-isotopic symplectic embeddings of □4(1/3) into □4.
A similar result holds for several other targets, like the open 4-cube, the complex projective plane, the product of two equal 2-spheres,
or a monotone product of such manifolds and any closed monotone toric symplectic manifold.
The proof uses exotic Lagrangian tori.
This is joint work with Joé Brendel and Grisha Mikhalkin.

Orateur: SCHLENK, Felix (Université de Neuchâtel)