

1068-53-176

Ana Cannas da Silva, Victor Guillemin and Ana Rita Pires* (arita@math.mit.edu).

Origami manifolds.

An origami manifold is a manifold equipped with a closed 2-form which is symplectic everywhere except on a hypersurface, where it is a folded form whose kernel defines a circle fibration. In this talk, I will explain how an origami manifold can be unfolded into a collection of symplectic pieces and conversely, how a collection of symplectic pieces can be folded (modulo compatibility conditions), into an origami manifold. Using equivariant versions of these operations, we will see how classic symplectic results of convexity and classification of toric manifolds translate to the origami world. (Received January 18, 2011)