

---

**Krieger Nelson Prize Lecture**  
**Conférence du Prix Krieger Nelson**

---

---

**Yael Karshon**, University of Toronto  
*Hamiltonian group actions*

This talk is about actions of compact Lie groups on symplectic manifolds, specifically those that are generated by moment maps. Such group actions model symmetries in classical mechanics and often arise in purely mathematical contexts. The moment map encodes manifold information into polytopes and graphs. The purpose of the talk is to give a taste of the field through a sample of examples and results, old and new.