FRANCOIS ZIEGLER, Georgia Southern University
Quantization, after Souriau

"Quantization" attaches representations to (prequantized) coadjoint orbits. It's also a rather unprincipled, motley cookbook of answers to questions which are not always very clearly spelled out. Ever dissatisfied with this situation, J.-M. Souriau spent his last few papers in an effort to clarify what "attached" should mean. Interestingly, the notion he proposed relaxes such requirements as uniqueness, irreducibility on transitive subgroups, and even continuity. In this talk, I will explain how it $1°)$ eschews "no-go theorems"; $2°)$ allows genuine eigenstates belonging to lagrangian submanifolds, as advocated by A. Weinstein; but $3°)$ is likely not quite restrictive enough.