

1. Cohomology rings of symplectic quotients Reference: the three references below
2. Nonabelian localization Reference: Jeffrey-Kirwan Topology 1995
3. Tolman-Weitsman theorem Reference: Tolman-Weitsman 2003
4. Residue theorem Reference: Jeffrey-Mare-Woolf 2005, Jeffrey 2003
5. Hypertoric manifolds; hyperkahler manifolds Reference: Hitchin-Karlhede-Lindström-Rocek
6. Poisson manifolds Reference; Weinstein “The local structure of Poisson manifolds”, 1983
7. Goresky-Kottwitz-MacPherson method – J. Tymoczko 2005; C. Cochet 2005; Guillemin-Zara 1998, 1999
8. Orbifolds Reference: Henriques-Metzler
9. Geometric invariant theory Reference: Richard Thomas 2006; Mumford-Fogarty-Kirwan *Geometric Invariant Theory* chapter 8
10. Lagrangian submanifolds Reference: Weinstein 1971
11. Real locus of a symplectic manifold Reference: Jeffrey-Mare 2009 and references therein
12. Geometric quantization Reference: Guillemin-Sternberg, *Geometric Asymptotics* 1990 (chapter 5)
13. Geometric quantization of toric manifolds (involving holomorphic sections of line bundles). Reference: Mark Hamilton’s U of T PhD thesis 2005; Fulton *Toric Varieties*
14. Loop groups; torus actions on the loop group Reference: Pressley-Segal 1986; Atiyah-Pressley 1983