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Singular angular momentum mappings.

J. Differential Geom. **24** (1986), *no. 2*, 181–203.

The authors reduce the system consisting of a nonrelativistic particle moving in $\mathbf{R}^n$ with vanishing angular momentum J on an algebraic level. They analyse the canonical structure of the constraint set $J^{-1}(0)$ and use algebro-geometric techniques to construct the reduced Poisson algebra of rotationally invariant observables explicitly. They completely identify the effects of the singularity in $J^{-1}(0)$ on the system. They reduce the system group-theoretically and compare the results with those obtained algebraically.

Reviewed by [Manfred Andrié](#)

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