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Collisional dynamics of ultracold Sr in an optical dipole trap[1] MI YAN, YENNY MARTINEZ DE ESCOBAR, PASCAL MICKELSON, THOMAS KILLIAN — A model for describing inelastic and elastic collision dynamics of atoms in an optical dipole trap (ODT) is presented, which is capable of describing traps with little or no spatial symmetry and atomic samples with relatively small ratios of trap depth to atom equilibrium temperature. We apply this model to ^{88}Sr in ODT which has well-characterized collisional properties and compare results of model with measurements.

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