

QUANTUM OPTICS SEMINAR



Title: Ultracold Triplet Molecules in the Rovibrational Ground State

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Time: Friday, November 21 at 11:15

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Abstract:

We have produced an ultracold gas of tightly bound Rb_2 triplet molecules in the rovibrational ground state, close to quantum degeneracy. This is achieved by optically transferring weakly bound Rb_2 molecules to the absolute lowest level of the ground triplet potential with a transfer efficiency of about 90%. The transfer takes place in a 3D optical lattice which traps a sizeable fraction of the tightly bound molecules with a lifetime exceeding 200 ms.

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