

## Weinstein Lab | UNR | SolsTiS

The Weinstein Lab acquired a SolsTiS Ti Sapphire Laser in 2010 and has since used it successfully in the following areas:

- Nonlinear optics experiments with Yb-171 (at 399 nm).
- Absorption spectroscopy of CH molecules at cryogenic temperatures (at 389 nm).
- Laser-induced fluorescence spectroscopy of LiH molecules produced by chemical reactions of Li and CaH at 1 Kelvin (at 401 nm).
- Spectroscopy and optical pumping of Rb atoms frozen in a solid argon crystal at 3 Kelvin.



Dr. Weinstein's Group studies ultracold atomic and molecular physics, with an emphasis on:

- techniques for cryogenic cooling– molecular collisions
- "exotic" cold atom collisions– atom and molecular spin dynamics & spin coherence
- coherent interaction of light with atomic gases– ultracold chemistry

(Thanks to Dr. Jonathan Weinstein).