1077-VJ-2838   **Zachary Paul Faubion*** (`zfaubion@uci.edu`). *Improving the Consistency Strength of Reflection at $\aleph_{\omega+1}$.*

Reflection at $\aleph_{\omega+1}$, the statement that every stationary subset of $\aleph_{\omega+1}$ has a reflection point below $\aleph_{\omega+1}$, was shown to be consistent given the consistency of infinitely many supercompact cardinals by Magidor in 1982. In this talk we will consider improving the known upper bound for the consistency to a quasi-compact cardinal, which is a large cardinal property below any non-trivial instance of a supercompact.

If κ is quasi-compact then every stationary subset of κ^+ has a reflection point of cofinality less than κ. Using a Modified Prikry forcing similar to the one used by Woodin to get the failure of SCH at $\aleph_\omega$ we can turn κ^+ in to $\aleph_{\omega+1}$ while preserving the reflection of stationary sets in the ground model. These results will be presented as well as possible methods for getting reflection for stationary sets which are added by the forcing to also reflect. (Received September 22, 2011)