1053-11-146 **Ameya Pitale*** (pitale@aimath.org), 360, Portage Ave, Palo Alto, CA 94306. *L-functions for* $\mathrm{GSp}(4) \times \mathrm{GL}(2)$ *and special values.*

Special values of L-functions has a long and rich history. For example, the value of the Riemann zeta function at even positive integers is rational up to a suitable power of π. Due to the work of Shimura, Garrett and many others, special value results for L-functions associated to one or more modular forms are known. These fit into the general framework of a conjecture of Deligne on special values of L-functions. I will give a brief glimpse of some of these results. Recently, in a joint work with Ralf Schmidt, I have been working on the L-function of a Siegel modular form twisted by any cuspidal automorphic GL(2) representation. We obtain an integral representation for the L-functions and obtain special value results as an application. (Received August 31, 2009)