University of Colorado
Department of Physics
Campus Box 390
Boulder, CO 80309

December 10, 2012

To whom it may concern

Shibi Rajagopalan was a student of Howard Baer at the University of Oklahoma at Norman. I have collaborated with him and his advisor on two papers on the phenomenology of a class of models that we have called inoAMSB . The name reflects the fact that AMSB determines the gaugino masses while the other soft terms are generated by renormalization group running as in gaugino mediation. These models have a natural origin in type IIB string theory compactified on a Calabi-Yau orientifold with internal fluxes. The phenomenology is very simple, in that it depends only on the value of the gravitino mass and $\tan\beta$ and therefore is highly predictive.

I believe Shibi played a major role in working out the phenomenology of these models. He is an expert on using the programs developed by Baer and collaborators to work out all the consequences of a given model of supersymmetry breaking and mediation. Shibi has also worked on other versions of AMSB (mAMSB and HAMSB) and has compared the phenomenology coming from all three versions in his thesis. In the same work he has also done a pretty good job of explaining the theoretical structure underlying these different versions. Furthermore he has (together with Howard Baer and others) written a nice paper (based on earlier work) on how the dark matter issue may be addressed in these different AMSB models. More recently he has (again with Baer and others) worked out the consequences of having a mixed axion neutralino scenario for dark matter.

Shibi has clearly mastered a set of tools which are going to be invaluable in the coming period, especially if the LHC were to discover supersymmetry. He is also an expert on analyzing the cosmological consequences of various beyond the standard model scenarios. I recommend him strongly for a post doctoral position at your institute.

Sincerely,

Senarath de Alwis
Professor