

## J. Gray: "Uses and methodology of the STRINGVACUA Mathematica package"

*Tuesday 12 August 2008 14:00 (30 minutes)*

I will discuss various applications of the subject of algorithmic algebraic geometry to string phenomenology. In particular i will demonstrate some of the functionality of the recently released STRINGVACUA mathematica package, which facilitates the use of such methods for physicists in our field. Examples will include the analysis of flux vacua and computing Yukawa couplings in smooth, non-standard embedded heterotic compactifications. At the request of some of the participants here, I shall attempt to focus, to some extent, on how these methods actually work rather than providing a comprehensive list of what they can do.

**Primary author:** GRAY, James (Oxford U.)

**Track Classification:** W4