This is joint work with Elena Guardo of Catania.

**ADAM VAN TUYL**, Lakehead University, Thunder Bay, ON, P7B 5E1 Some resolutions of double points in  $\mathbb{P}^1 \times \mathbb{P}^1$ 

Let Z be a finite set of double points in  $\mathbb{P}^1 \times \mathbb{P}^1$  and suppose further that X, the support of Z, is arithmetically Cohen–Macaulay (ACM). I will present an algorithm, which depends only upon a combinatorial description of X, for the bigraded Betti numbers of  $I_Z$ , the defining ideal of Z.