Jason Gaddis\* (gaddisjd@wfu.edu) and Daniel Rogalski. Blowups of 4-dimensional Sklyanin algebras. Preliminary report.

We discuss ongoing work in our attempt to understand from a ring-theoretic point of view the blowups of 4-dimensional Sklyanin algebras. A key component in this construction is to determine the category of GK dimension one modules in A (modulo those of finite dimension over the ground field k). Generalizing a result of Van den Bergh and Van Gastel from the 3-dimensional case, we show that this may be realized as the category of finite k-dimension modules over a certain completed path algebra. (Received January 19, 2015)