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**David Eisenbud\*** ([de@msri.org](mailto:de@msri.org)), David Eisenbud, Director, Mathematical Sciences Research Institute, 1000 Centennial Drive, Berkeley, CA 94720-5070. *Resultants and Chow forms via exterior algebra*. Preliminary report.

I will describe recent work with Frank-Olaf Schreyer in which we show how to compute Chow forms (and in particular, resultants) via free resolutions over the exterior algebra. The method works particularly well for curves, where it gives matrices in the Pluecker coordinates whose determinants are expressions of the Chow form. The matrices may be computed in terms of free resolutions over the exterior or over the symmetric algebra. (Received September 25, 2000)