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David Eisenbud*, Mathematical Sciences Research Institute. *Threads from My Life: Linear (good) Resolutions and Small (seductive) Varieties.*

When I first entered the field of algebraic geometry, a beautiful 100-year-old result caught my eye and has been somewhere in my field of view ever since. The result is the classification of varieties of minimal degree by del Pezzo and Bertini – a nonlinear extension of the fact that any two bases of a finite dimensional vector space are conjugate. The field offers approaches through linear algebra, commutative algebra, and algebraic geometry; many applications; modern extensions; and plenty of related open problems.

In this talk, a mixture of mathematics and autobiography, I'll describe some of the personal and mathematical interactions that led to my fascination with this subject, and how it has played out over my career.

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