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Ursula A. Whitcher* (ursula@math.washington.edu). *K3 Surfaces and Modular Parametrizations.*

The Griffiths-Dwork technique provides an algorithm for computing Picard-Fuchs equations for families of hypersurfaces in projective space. We use the Griffiths-Dwork technique to compute the Picard-Fuchs equations of a canonical family of lattice-polarized K3 surfaces, and relate the Picard-Fuchs equations to isogeny of elliptic curves.

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