Jeremy Gray, The Open University "The Riemann-Roch theorem and geometry, 1854-1916"

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The Riemann-Roch theorem is a celebrated example of a result in mathematics that has many meanings and many, diverse, applications. In this talk, I shall concentrate on some of the more geometrical interpretations made of Riemann's ideas-- themselves part of his re-creation of complex function theory -- taking the story via the work of Brill and Noether to the original classification of algebraic surfaces by Castelnuovo and Enriques.