

Zeros of classical orthogonal polynomials in two variables

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The behaviour of the zeros of classical orthogonal polynomials in one variable has been studied extensively for years. As far as we know, in two variables, the problem was tackled by Charles Hermite in 1865 for the biorthogonal basis of classical orthogonal polynomials on the unit disk. The first issue you find when you deal with this topic is that, in general, these zeros are not points and they depend on the orthogonal base chosen in every case. The aim of this talk is to show some results, difficulties and open problems about this subject.