

Terwilliger algebra of a distance-regular graph

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The aim of this talk is to introduce Terwilliger algebra of a graph. We will first define Terwilliger algebra of an arbitrary connected simple graph, and its (irreducible) modules. We will show that in the context of Terwilliger algebras, distance-regular graphs arise quite naturally. In the second part of the talk we will therefore focus on this class of graphs. We will be interested in the interplay between certain combinatorial properties of a distance-regular graph and the module structure of the associated Terwilliger algebra.