Algebra and number theory
Seminar

Pascal's rule for vector bundles of rank four

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Abstract: The low dimensional "exceptional" isomorphisms of Dynkin diagrams have been exploited in various ways to describe torsors for the corresponding linear algebraic groups over fields and rings. In this talk, we show how a version of the combinatorial Pascal's rule, adapted to vector bundles over algebraic varieties, can be used to define a Witt group-theoretic obstruction to the existence of certain decompositions. For vector bundles of rank four over projective varieties, we use the exceptional isomorphism $A_3 = D_3$ to prove that this is the only obstruction.

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Mathematics and Science Center: E406

Mathematics and Computer Science
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