Oberseminar Geometrie
Department of Mathematics
University of Fribourg
Lecture room 2.52 Physics
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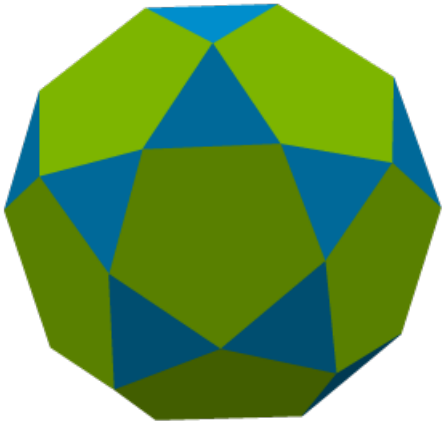

Giuliano Basso (UniFR)

Minimal projections in Banach spaces

Linear projections have been the object of study of many researchers and the literature can be traced back to the classical book by Banach. The question about the maximal value λ_n of the projection constants of n-dimensional Banach spaces has persisted and is a notoriously difficult one. In 2010, Chalmers and Lewicki showed that $\lambda_2 = 4/3$. In this talk, I will outline an alternative proof of this result using tools from discrete geometry. Moreover, I will give some evidence that $\lambda_3 = (1+\sqrt{5})/2$, realized by the Banach space having an icosidodecahedron as unit ball.