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## Unifications in particle physics: from coupling crossing to asymptotic unification

*Tuesday, 4 July 2023 09:00 (1 hour)*

The structure of the Standard Model of particle physics inspired the idea that, at high energy, a simple unified description is possible in terms of only one unified gauge coupling. Various approaches, with different gauge groups describing the unified theory, were proposed, but realistic models are typically non-minimal. After introducing the historical path that led to these theories I will discuss a new possibility where the gauge couplings evolve asymptotically towards the same fixed point at high energy.

**Apply to be considered for a student ; award (Yes / No)?**

N/A

**Level for award;(Hons, MSc, PhD, N/A)?**

N/A

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