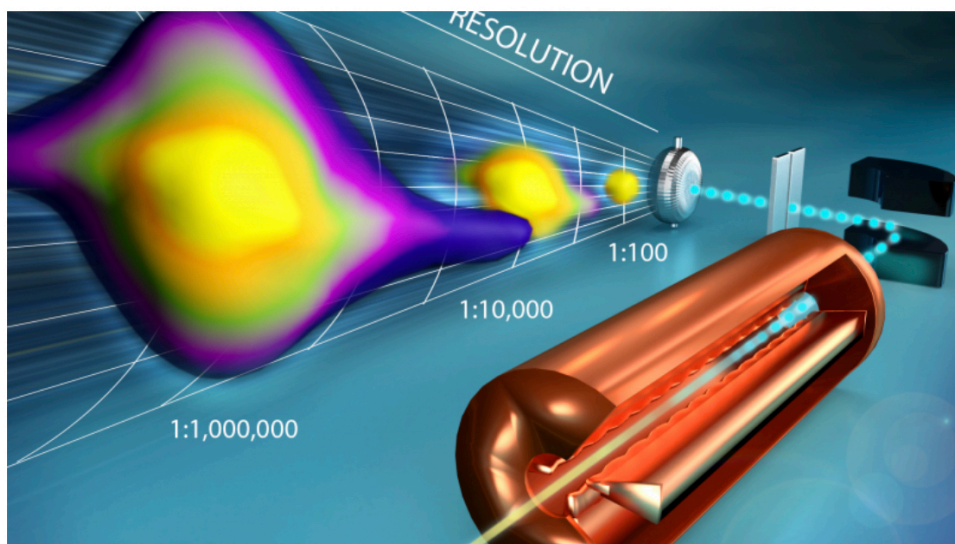

General Maps M and other Delights related to Beam Dynamics

Particle accelerator physics and Modelling

Prof. Dr. Andreas Adelman, Paul Scherrer Institut, Villigen,
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In this seminar, we will explore the transition from linear to non-linear beam dynamics and introduce various mathematical tools, including Taylor models, differential algebra, and Lie algebraic methods. We will discover the experimental tool called JuliAccel, a single particle tracking package based on Julia programming language. Additionally, we will discuss collective effects with a particular emphasis on space charge and examine particle in cell methods as a preferred approach. Time permitting, we will also cover collisions.



Wednesday: April 12-19-26 ore 13.30-15.30 Aula F1, Polo Fibonacci

Friday: April 14-21-28 ore 16.30-18.30, Aula O, Polo Fibonacci

eTeams link:

[https://teams.microsoft.com/j/channel/19%3aqHRWHptIylAhIha7d2Zm8ovZBnegD8HvT_-KJ_aPJ41%40thread.tacv2/General?](https://teams.microsoft.com/j/channel/19%3aqHRWHptIylAhIha7d2Zm8ovZBnegD8HvT_-KJ_aPJ41%40thread.tacv2/General?groupId=6f59c4ec-e344-4be7-941e-0eedab7a8b79&tenantId=c7456b31-a220-47f5-be52-473828670aa1)

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Team Code: oaqjiun
