



Seminar: Advanced Topics on Physics

Speaker

Andrea Vitturi

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Zoom Meeting link

<https://unipd.zoom.us/j/81095582579?pwd=ZHpXUVpiWGFrNE9JVC82WmxJS Hlqdz09>

Meeting ID: 810 9558 2579

April 21 - 12:30 pm - 2:30 pm

Title: Fusion processes (I)

Abstract: Fusion processes. One-barrier penetration model. Classical and quantal approaches.

Subbarrier fusion and the role of the excitation of the internal degrees of freedom.

April 23 - 2:00 pm - 4:00 pm

Title: Fusion processes (II)

Abstract: Barrier distribution. Fusion with weakly-bound systems and the role of break-up processes. The treatment of continuum states.

April 28 - 12:30 pm - 2:30 pm

Title: Pairing and pair transfer reactions (I)

Pairing interaction and two-particle transfer reactions. Enhanced space correlations due to pairing. Reactions models for two-particle transfer processes. Selectivity in energy and angular momentum of two-particle transfer reactions.

April 30 - 2:30 pm - 4:30 pm

Title: Pairing and pair transfer reactions (II)

Two-particle transfer reactions to excited 0^+ states. The search for the Giant Pairing Resonance. Two-particle transfer reactions for weakly-bound nuclei and the role of continuum. Other reactions connected to pairing: the cases of two-particle knock-out and of double-charge exchange.



Erasmus Mundus
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