

## DIPARTIMENTO DI FISICA E CHIMICA - DiFC

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Gruppo di Ricerca sull'Insegnamento-Apprendimento della Fisica

Il Prof. Gareth Jones (Imperial College London) terrà un seminario dal titolo:

## Why and how do students learn physics? How should we teach them?

Giorno 23 Ottobre 2018 alle ore 15.30 presso l'Aula Scuola di Specializzazione, DiFC, viale delle Scienze, edificio 18.

Tutti gli interessati sono invitati a partecipare.

## **Abstract:**

Physics is at the endpoint of the eternal question "why?" that children ask when they want to know and understand the world around them as they grow up. So the study of physics links with very basic urges to understand things deeply and properly. Those who keep asking such questions may decide to study physics at a university.

By the time they are thinking of what to study at university, young people are aware of three other characteristics of physics: (a) the power and beauty of using mathematics in physics, (b) the power of physics to solve all kinds of problems, and (c) the role of physics in developing new technology. They will also be thinking of what kind of a job they can get! So how should we teach them? There are many ways of teaching physics some of which go back a long time and some are more recent. The most effective ways, old and new, all involve some kind of "Active Learning". It is the students' minds which should be active.

This presentation will try to develop some general principles and give some examples. It will also present some results of a large European wide investigation (involving both Palermo University and Imperial College London) of what inspires young people to study physics at university.