

What inspires young people to study physics? Results from the WG1 interviews survey

*O. Levrini**, *G. Tasquier*

University of Bologna, Italy

A. De Ambrosis, *M. Malgieri*

University of Pavia, Italy

S. Hemmer, *O. Pantano*

INFN and University of Padova, Italy

A. Laherto

University of Helsinki, Finland

ABSTRACT

The talk will focus on the main results of an Interview based Survey of 1st Year University Physics Students, carried out within Working Group 1 (WG1) of the HOPE project.

Among the HOPE activities, 112 interviews have been conducted in 16 universities, in order to investigate in some depth the factors that inspire young people to study physics and to identify possible critical factors which can produce the dropping out.

The individual interviews have been carried out on a selection of students who had previously answered the WG1 Questionnaire on the inspirational factors, led by Gareth Jones from the Imperial College, London. In the talk, we will show how the interviews helped us to unpack the main results achieved with the questionnaire survey. In particular, we will present a comprehensive picture of “curiosity” which turned out to be the predominant motivating factor and we will show how the interviews can throw extra light on reasons for comparatively low scores for factors like (i) enhancing employment prospects, (ii) effect of physics teacher, (iii) scientists in the family.

A special emphasis will be put on the methods we used to pursue the main purposes of the survey: a) to provide extra evidence supporting the validity of responses to questionnaires, b) to understand the different perspectives, interests and curiosity of students with respect to physics. Latter understanding may help academic curriculum developers and teaching personnel in the design of courses and instruction which better supports students’ curiosity and interest, and thereby, keeps students active and motivated in their studies and future careers.

* <mailto:olivia.levrini2@unibo.it>