MINISTÉRIO DA CIÊNCIA E DO ENSINO SUPERIOR

Portugal

RESEARCH UNIT NUMBER 2/618

COORDINATOR Margarida Maria Telo da Gama

RESEARCH UNIT NAME Centro de Física Teórica e Computacional

Fundação da Universidade de Lisboa

PANEL MEMBERS Claude Détraz, Martial Ducloy, Martin C. E. Huber, Herwig Schopper, David George Walmsley, Denis Weaire (Coordinator)

Overall Research Unit Quality Excellent < 'ery Good 0 Good 0 Fair 0 Poor

Comments and recommendations regarding the Unit activities, research orientation, organization and application of funds

Physics Very Good

This new Unit, partly originating from the Centro de Física da Matéria Condensada, is based on a promising concept. It brings together — in an conducive environment — ambitious, predominantly young researchers, who will combine their talents to attack a series of interesting, often fundamental problems in physics as well as other sciences. 'Do what we do well, but better' is their first aim. The focus is primarily on theoretical physics, and involves (creative) computing where appropriate or necessary.

The presentation was comprehensive and fully transparent. The topics which have been chosen are all very relevant and intresting including fundamental questions in particle physics and cosmology to protein folding and models for the spreading of epidemics. The leader of the unit and the young researchers who presented the programme and results of the unit gave an excellent impression. Although these topics are quite different their is a coherence between the members of the unit. One expression of this is a weekly seminar which is also open to scientists from outside the unit.

Together with ten staff members of Ph.D. and Agregado level, the Unit currently has seven postdocs, predominantly from abroad, and five students. The rate and quality of scientific publications is sound. This, and the number of PhD students and postdocs attracted to thus unit are testimonies to its quality and attractiveness of the Unit, which could become an important focal point for theoretical physics in general.

The creation of the team is a refreshing development, harnessing the energies of younger theoreticians in a positive manner that deserves support The Centre's members are pro-active in seeking support. They are participating in numerous national and international collaborations, in several ESF Networks and have expressed interest within two promising Networks of Excellence for the 6th Framework Programme of the EU.