

Warsaw Theory Institute to Open



From the left, Professors Jan Kalinowski, Józef Spalek and Antoni Sym, Director and Deputy-Directors, respectively, of the new Warsaw International Centre for Theoretical Physics.

Following a long tradition of excellence, the University of Warsaw's Institute of Theoretical Physics, with the University Senate's endorsement, will start operating next spring semester an International Centre for Theoretical Physics. The date of the Centre's inauguration is tentatively planned for February/March 1993 once an expansion of the Physics Faculty buildings is completed.

The first assured activity will be a series of lectures in English for graduate students.

Resources have also been found for desktop editing facilities so that lecture notes of high quality can be published. Meanwhile, funding is being sought for post-doctoral fellowships and for distinguished visitors who would offer advanced courses. A programme of workshops and symposia underlining the multidisciplinary aspects of modern physics would round-out activities (the first workshop — on strongly correlated fermions — will be held next summer).

Professor Jan Kalinowski is the Director and is responsible for research in the area of fundamental interactions. Professors Józef Spalek and Antoni Sym, the two Deputy-Directors handle condensed matter and nonlinear field theory, respectively; the plan is to feel the way ahead before expanding into other topics. The only paid position will be an Executive Secretary as 19 eminent theoreticians from both the Centre of Theoretical Physics of the Polish Academy of Sciences and the University have agreed to work on a voluntary basis for the new centre, which will be housed at first in the main building of the University's physics department. With international standards in mind, the Centre's constitution calls for an annual review by an independent Review Council and for the competitive award of open fellowships by an Executive Board assisted by an Advisory Board.

The ICTP Warsaw clearly has, by any reckoning, the potential to vigorously promote modern physics within central and eastern Europe. For further information, please contact the Director or either of the Deputy Directors at the ICTP Warsaw, Faculty of Physics, Warsaw University, ul. Hoza 69, PL-00 681 Warsaw (tel.: +48-2-628 33 96; fax: +48-22-21 94 75; e-mail: kalino @ fuw.edu.pl).

The Foundation for Fundamental Research on Matter

promotes fundamental scientific research in The Netherlands, in particular at universities.

The Foundation tries to achieve this purpose by stimulating research in new fields of physics, by co-ordinating existing research projects and by training of young physicists.

Postdoc position (m/f) for theoretical research on colloidal crystals

Within the Physical Transport Phenomena Section of the Department of Applied Physics of Eindhoven University of Technology one of the research groups is working on suspensions. This group is supported by the Dutch Foundation for Fundamental Research on Matter (FOM). It is also part of the J.M. Burgerscentre, a recently established research school. The group has a vacancy for a postdoc physicist. In our group theoretical, experimental and numerical investigations have been performed in the field of suspensions in flows with velocity gradients and colloidal crystals. The experiments are based on light scattering and photon correlation measurements. The theoretical research up till now was directed primarily at methods to calculate the influence of hydrodynamic interactions on mobilities, diffusion coefficients, viscosity and sedimentation velocities, both in quasi-static approximation and with full account of retardation. Numerical work is necessary to eventually obtain concrete results.

Specification of duties

The applications of the methods mentioned above is very attractive due to the periodicity of colloidal crystals. It will be possible to reduce the N-particle problem to a problem of free quasi-particles. Through this method the project aims at gaining theoretical insight in the properties of colloidal crystals, especially mobilities, viscosity and sedimentation velocities. Also research will be started concerning the influence of hydrodynamic interactions on the dispersion relations for longitudinal and transverse waves.

After the necessary adaptation of existing theory to this problem, numerical implementation will be required. To this end the FOM-project is expected to acquire a "workstation".

Requirements

Recently you obtained a PhD degree on a physics' topic or you will obtain a degree very soon. As a result you have excellent experience in theoretical research and computer calculations. You are interested in Fluid Mechanics and Statistical Physics.

Conditions of employment

You will be employed by the Foundation FOM (Fundamental Research on Matter) on the basis of a temporary contract for the period of one year. The gross salary amounts to Dfl 5,796.- per month maximal. The employment conditions closely follow the Dutch Civil Servants Code, including admission to the "Algemeen burgerlijk pensioenfonds" (pension fund).

Information

Prof. dr. ir. P.P.J.M. Schram, telephone ++31-40-472713 (473110 in case of absence), will be pleased to give further information.

Application

Your written application should be directed within two weeks after publication of this advertisement to the Department of Applied Physics of Eindhoven University of Technology, c/o prof.dr.ir. P.P.J.M. Schram, Building W&S, Eindhoven University of Technology, P.O. Box 513, 5600 MB Eindhoven, The Netherlands.

