

From APS News, January 2002.

New Hadronic Physics Topical Group Approved

The APS Council approved the formation of a new topical group on hadronic physics at its November meeting. Hadronic physics is the study of strongly interacting matter, and incorporates such subfields as quantum chromodynamics, relativistic heavy ion physics, and lattice gauge theory.

The underlying questions which drive the field have deep potential impact on nuclear physics, high energy physics, astrophysics and cosmology.

"Thirty years ago, hadronic physics formed an integral portion of high energy particle physics," says Eric Swanson of the University of Pittsburgh, one of the new topical group's founding members. "Since then, particle physics has moved on to Higgs energy scales and hadronic physics has spun off as a separate field. Unfortunately, this is not recognized in the structure of the APS or by the funding agencies. The result is a scattered and disenfranchised community."

In journals, conferences, and advisory panels, hadronic physicists often find themselves bundled together with particle and nuclear physicists, although neither area is primarily concerned with the issues that drive hadronic physics. From a funding standpoint, "It is difficult to argue for funds for a field which is regarded as voiceless or even nonexistent," says Swanson, adding that both DOE and NSF representatives "have told us bluntly to organize and build a coherent presence."

The move to form a topical group began in October 2000, when Swanson and his co-founders realized that "there was a pent-up need for representation," and decided an APS topical group was the least disruptive means of achieving these goals. Since then more than 330 physicists from 34 countries around the world have signed the petition to form such a body. The only country with an official hadronic physics organization is Germany, and hence the organizers expect the new APS topical group to bring in many new international members, as well as creating a home for several hundred American hadronic physicists and providing vital advocacy with funding agencies.

While some express concern that adding yet another unit to the APS structure will further balkanize the Society, Swanson believes that careful organization can prevent such an effect. The leadership of the new topical group and that of the APS Division of Nuclear Physics have agreed to work together in promoting the interests of both groups.

For example, the topical group program committee could make suggestions for a hadronic component to DNP meetings, which would increase attendance of hadronic physicists at such meetings and generate new interdisciplinary contacts.

"I am impressed by the list of people who signed up," says DNP Chair Joel Moss of Los Alamos National Laboratory. "The group may well achieve the goal of bringing more attendance and participation to the April meeting." As for collaboration with other units, there is already a joint DNP/DPF session on hadron spectroscopy planned for the April 2002 meeting in Albuquerque.

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