

The other route to nuclear fusion

More than 20 years passed by since Boris Sharkov and Dieter HH Hoffmann met for the first time in 1988 at a seminar held at ITEP-Moscow. Both scientists were driven by the desire to explore the properties of intense heavy ion beams with regard to their ability to ignite a fusion pellet.



Figure 1. Boris Sharkov and Dieter HH Hoffmann at a common presentation at the Russian Academy of Sciences.

At that time the intensity available at ion accelerators was still very low, however plans for more powerful accelerators to be built were discussed in many places worldwide. They pointed out that a basic research program at accelerators at ITEP, GSI Berkeley and others would not only address problems of future ion drivers for fusion, but in addition would open the door to a yet unexplored realm in plasma physics where researchers would investigate matter under extreme conditions of pressure, density and temperature.

They started collaboration between their respective groups, which later grew into a large international community. Today we are on the eve of ignition of a fusion target with a high power laser. This makes the quest for an efficient driver with high repetition capability even more urgent. The upcoming FAIR facility in Darmstadt will probably boost the progress in High Energy Density Physics with the ultimate aim that the gained knowledge from this research and the advancement in accelerator technology will soon enable the community to design an accelerator driver for fusion.

Boris Sharkov is presently the designated scientific director of the FAIR project and member of the

board of directors at GSI-Darmstadt. Dieter HH Hoffmann is full professor of physics at the technical university in Darmstadt. In these positions they continue to collaborate to make the other route to nuclear fusion more likely.

- Dieter H. H. Hoffmann

Happy Birthday

The HIFS-VNL wishes a Happy 60th Birthday to Dieter H. H. Hoffmann and Boris Sharkov.

- The HIFS-VNL

HEDP Workshop announcement

The 2010 Ion Beam Driven High Energy Density Physics Workshop will be held in Pleasanton, CA, USA, on June 22-24, 2010.



For more information, visit the workshop web site at <http://hifweb.lbl.gov/public/BeamHEDP2010/Home.html>.

18th HIF Symposium announcement

The 18th International Symposium on Heavy Ion Inertial Fusion will be held in Darmstadt, Germany, from August 30 to September 3, 2010.



For more information, visit the symposium web site at <http://www.gsi.de/forschung/pp/dates/HIF2010.html>.