

Leader in laser research wins distinguished award for experimental physics

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An internationally acclaimed Imperial researcher who works with the highest power lasers in the world has collected a distinguished award from the Institute of Physics.

Professor Karl Krushelnick, Department of Physics, has won the annual Boys Medal and Prize, awarded to a physicist early in their career for distinguished research in experimental physics. Professor Krushelnick was cited for his contribution to plasma physics through wide-ranging investigations on the interaction of ultra-intense lasers with matter. He collected the medal and £1,000 prize at a ceremony at London's Savoy Hotel on Thursday 19 January.

Professor Krushelnick's achievements include developing new techniques that could help shrink the size and cost of particle accelerators. These devices use the plasmas created by ultra-high intensity lasers to propel electrons and ions to very high energies. In addition Professor Krushelnick has generated the world's largest magnetic fields in the laboratory and has also investigated the use of ultra high power lasers to enhance the efficiency of energy production from fusion reactions.

Professor Krushelnick joined Imperial as a lecturer in the plasma physics group in 1997 and he is now Professor of Plasma Physics.

Professor Krushelnick said: "I was happy when I heard the news and somewhat surprised. But this award really recognizes a body of work



which wouldn't have been possible without the hard work of my students and my many collaborators - in particular the people in plasma physics group at Imperial College London and at the Central Laser Facility of the Rutherford Appleton Laboratory."

Professor Sir Peter Knight, Principal of the Faculty of Natural Sciences, said: "We offer our warmest congratulations to Karl and we're thrilled that his work has been recognised in this way. Karl is one of the world's leaders in the use of high intensity lasers in plasma physics. He was a leading light in the team that demonstrated the fast igniter concept, where a high intensity laser beam is used to spark a fusion reaction. He was also the first person to carry out science using the huge Vulcan Petawatt laser at Rutherford, currently the brightest laser in the world. His award is well deserved."

Source: Imperial College London

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