



## **Prof. Matt Welsh**

Dr. Matt Welsh is an assistant professor in the Division of Engineering and Applied Sciences at Harvard University. His current research is in the area of operating systems, networks, and language support for large-scale distributed systems. He visited IIT Kanpur from August 1-31, 2006.

### **1 Research collaboration and related activities**

One of the chief purposes of his visit was to make contacts at the IITs, as well as to get direct exposure to the Indian educational system and burgeoning IT industry. On research front, he interacted with Dr. Bhaskaran Raman (and Dr. Chebrolu from the EE department) and their students, who have a number of projects that intersect directly with his interests: wireless communications and sensor networks. He delivered several lectures during his visit. He gave two talks to the CS department as a whole on various research topics: his work on volcano monitoring sensor networks, and a general research talk on virtual machines. He also delivered two guest lectures in the Operating Systems course (the equivalent of which he teaches at Harvard), on the mechanics of processes and threading in the Linux operating system.

### **2 Future Interactions**

Dr. Welsh hopes that his stay has laid the groundwork for a continued relationship with IIT Kanpur. The project on developing sensor network platforms for monitoring volcanic eruptions that his group has been working on at Harvard has much in common with one of Dr. Raman's projects, involving wireless sensors for railway bridge monitoring. The two groups have remained in contact and continue to assist each other on these development efforts after his return. He also told that as a result of his visit, there have been discussions within the EECS faculty at Harvard about starting up a summer internship program for foreign students, specifically targeted at students from IIT. He has expressed warm willingness to host a visit to Harvard by faculty from IIT Kanpur.