

Fakultät II

Informatik, Wirtschaftsund Rechtswissenschaften Department für Informatik

## **Sondervortrag**

Am Donnerstag, dem 17. Juni 2010, um 14:30 Uhr hält

Hisayuki AOYAMA Professor of Robotics Division

Department of Mechanical Engineering & Intelligent Systems University of Electro-Communications, Tokyo

einen Vortrag mit dem Titel

## **Desktop Micro Robots Factory and Its Applications**

Der Vortrag findet im OFFIS F02 statt.

## **Zusammenfassung:**

In this talk, an unique micro production system which is organized by several miniature robots with accurate versatility in microscopic range is discussed. Our small robot, size of which is approximately 1 cubic inch, is composed of piezo elements for the source of micro locomotion and electromagnets for clamping on the surface. This simple mechanism can provide good accurate mobility and design modularity. In the several experiments, it is demonstrated that they can provide unique microscopic machining and manipulating performances. Also several small robots can collaborate in making micro through-holes on the sample plate and pattern control of thin film in the deposition process. These experimental results indicate the potential capabilities of micro robots to the promising industrial applications with much of cost saving benefit.

Eingeladen von: Prof. Dr. Sergej Fatikow