

**A U S H A N G**

---

**FREIE UNIVERSITÄT BERLIN**

**Fachbereich Mathematik und Informatik**

Promotionsbüro, Arnimallee 14, 14195 Berlin

**D I S P U T A T I O N**

**Freitag, 10. Mai 2019, 13:00 Uhr**

**Ort: Raum K40**

**(Fachbereich Mathematik und Informatik, Takustr.9, 14195 Berlin)**

**Disputation über die Doktorarbeit von**

**Herrn Zakaria Kasmi**

**Thema der Dissertation:**

**Open Platform Architecture for Decentralized Localization Systems  
Based on Resource-Constrained Devices**

**Thema der Disputation:**

**Location of Things (LoT) Using an Open Decentralized Architecture**

Die Arbeit wurde unter der Betreuung von **Prof. Dr.-Ing. J. Schiller** durchgeführt.

**Abstract:**

The Internet of Things (IoT) involves various communication technologies such as Internet, WiFi, Bluetooth, infrared, or Zigbee enabling the localization and the tracking of several objects in different ways. Localization information is crucial to achieve context-aware and intelligent IoT systems, since the IoT connect sensors and actuators "Things" to exchange information. The Location of Things (LoT) can serve as a smart service that enables automatically discoverable applications such as asset tracking, inventory management, or routing and navigation.

Other examples of LoT are the localization of sensor nodes or of fire fighters wearing sensing devices. The use of an open decentralized architecture can facilitate the localization of IoT, whereby the decentralized processing of a position enables to push the application-level knowledge into a mobile station and avoids the communication with a central unit such as a server or a base station.

Die Disputation besteht aus dem o. g. Vortrag, danach der Vorstellung der Dissertation einschließlich jeweils anschließenden Aussprachen.

**Interessierte werden hiermit herzlich eingeladen**

Der Vorsitzende der Promotionskommission  
Prof. Dr.-Ing. J. Schiller