

## **Biomechanics for computer-assisted medical interventions**

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### Yohan Payan:

CNRS Research Director, Yohan Payan is the Head of the Grenoble CAMI team (Computer Assisted Medical Interventions – 50 people) and the Deputy Director of TIMC-IMAG Laboratory ([www-timc.imag.fr](http://www-timc.imag.fr) – 300 people). He also coordinates the Eccami platform ([www.eccami.org](http://www.eccami.org)).

### Abstract of the presentation:

Yohan Payan's research interests concern the biomechanical modeling of soft tissues in the context of Computer-Assisted Medical Interventions (CAMI). The lecture will introduce the CAMI field while focusing on the main challenges researchers face in the future, *i.e.* the automatic generation of patient-specific models of organs and the integration of simulation tools into medical devices enabling real-time computations of these models. These challenges will be illustrated in the domain of plastic and maxillofacial surgery and for pressure ulcers prevention procedures (in paraplegic patients and diabetic persons).