

1. Record Nr.	UNINA9910346718803321
Autore	Ballmann Evgeniya
Titolo	Physics-Based Probabilistic Motion Compensation of Elastically Deformable Objects
Pubbl/distr/stampa	KIT Scientific Publishing, 2012
ISBN	1000028591
Descrizione fisica	1 electronic resource (XIX, 212 p. p.)
Collana	Karlsruhe Series on Intelligent Sensor-Actuator-Systems / Karlsruher Institut für Technologie, Intelligent Sensor-Actuator-Systems Laboratory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	A predictive tracking approach and a novel method for visual motion compensation are introduced, which accurately reconstruct and compensate the deformation of the elastic object, even in the case of complete measurement information loss. The core of the methods involves a probabilistic physical model of the object, from which all other mathematical models are systematically derived. Due to flexible adaptation of the models, the balance between their complexity and their accuracy is achieved.