Andrea Bajo Defends his Ph.D. Dissertation

Written by Nabil Simaan
Sunday, 17 March 2013 09:37 - Last Updated Monday, 06 May 2013 06:37

Andrea Bajo successfully defended his Ph.D. dissertation on 3/15/2013. His dissertation titled “Control, Sensing, and Telemanipulation of Surgical Continuum Robots” presents contributions in the areas of contact detection and estimation of contact location for continuum robots, hybrid force/motion control for continuum robots, and constrained telemanipulation of continuum robots. Algorithms developed during his Ph.D. research were implemented on several robotic platforms including the single port access surgical system (the IREP), a novel robot for trans-urethral bladder tumor resection, and a robot for micro-surgery of the upper airways.

Andrea started his journey with ARMA as a visiting undergraduate student in summer of 2007. He returned to ARMA as a masters student in 9/2008 and has been with ARMA since then. He has contributed to the development of several robotic systems in the lab and assisted in developing research plans for natural orifice surgery in several application areas including Urology, otolaryngology, and trans-abdominal single port access surgery.