

6th Edition of the Georges Giralt PhD Award

Presentation in the Awards Ceremony on 28, March 2007 in Chania-Crete.

The 6th edition of the Georges Giralt PhD Award was addressed to recognize the best Thesis presented in Europe during the year 2005 evaluating not only the Thesis itself but its relevance measured as their impact in publications, patents or its exploitation.

In the awards ceremony the three best submitted Thesis were presented for nomination and among them the winner was selected. The three nominees are, in order of reception of submissions are:

Author: **Giovanni Tonietti**,

Title: ***Variable impedance actuation: A co-design solution to the safety/performance tradeoff in physical human robot interaction***

Advisor: **Antonio Bicchi**, University of Pisa, Italy

*Design of robot mechanisms for safety human robot interaction based on the concept: **variable impedance actuation**.*

Good compromise between mechanical design using soft mechanisms and control strategy.

Author: **Björn Verrelst**,

Title: ***A dynamic walking biped actuated by pleated pneumatic artificial muscles***

Advisor: **Dirl Lefever**, Vrije University, Belgium

Outstanding work on humanoid robotics with own theoretical contributions on compliant actuators, pneumatic artificial muscle, and stiffness control. Application to the Lucy humanoid walking robot.

Author: **Pierre Lamon**,

Title: ***3D position tracking for all-terrain robots***

Advisor: **Roland Siegwart**, EPFL, Switzerland

Development of a robust control system for a rover to be used for ExoMars exploration (ESA). The proposed control minimizes slippage and is configurable for any wheel not requiring soil model.

Theoretical basis for practical applications

The last nominee, and the **Winner of the Award** was selected as the winner for the impact of his research and depth theoretical as well as practical results

The Award consists of a Diploma for the three nominees and a prize of 2500 € for the winner.

The winner is invited to publish the thesis in the Springer- STAR Series, while the two nominees are invited to submit their work for their potential publication in the same series.