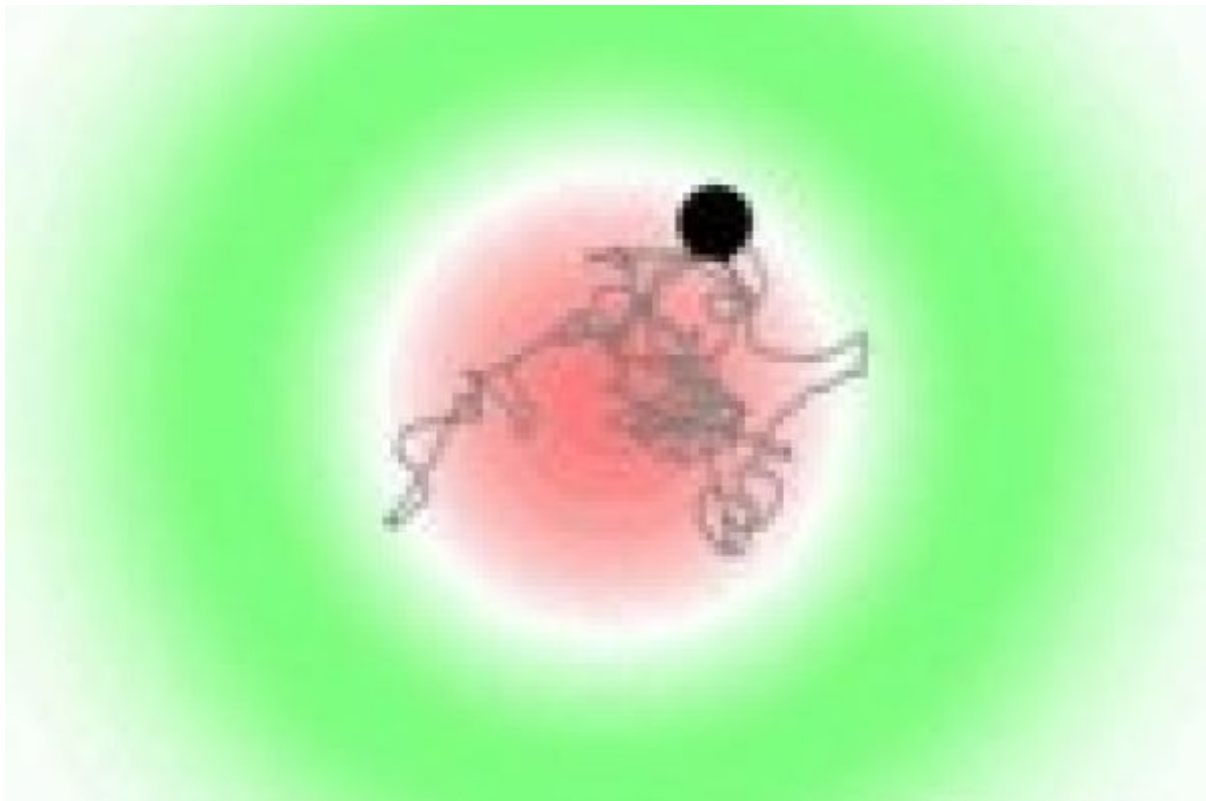




ICFO student finalist of the OSA- New Focus/Bookham Student Award 2007

Giovanni Volpe selected as one of the seven finalists for his work on ultrasmall molecular scale torque detection

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ICFO PhD student Giovanni Volpe has been selected for the 2007 OSA-New Focus/Bookham Student Award. The seven finalists presented their talks on Tuesday, May 8, at the CLEO/QELS 2007 Conference in Baltimore, Maryland. This prestigious award was established in 1997 to encourage research excellence, presentation prowess, and leadership in the optics community among OSA Student Members worldwide.

Giovanni Volpe got an Engineering Telecom degree from the Università degli Studi di Padova in Italy. Since then he is working in his PhD thesis in the optical tweezers group lead by Prof. Dmitri Petrov at ICFO. He is also the president of the ICFO-OSA student chapter.

Volpe and Petrov have conceived a new technique to measure torque using statistical methods similar to what researchers use for linear force measurements. Compared to other measurements, this method achieves ten times higher torque sensitivity and it could be applied to proteins, DNA, or even synthetic nanomotors developed for futuristic devices.

The new method was reported in the 24 November Physical Review Letters issue and was highlighted by Physical Review Focus, a service of the American Physical Society that selects physics research published in the APS journals, which stands out for its educational value and intrinsic interest to non-specialists.