Strategies for mechanical metamaterial design

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Publication List

(i) Nitin Singh and Martin van Hecke,
Computer-aided Design of Complex Mechanical Metamaterials,
In preparation.

(ii) Nitin Singh, Corentin Coulais, Bastiaan Florijn, and Martin van Hecke.
The Soft Mechanism,
In preparation.

Curriculum Vitae

I was born on April 23rd, 1991 in Barnala (India). I grew up in the same city, and received my primary, middle and secondary education at the Y S School, finishing my matriculation in 2006. I received my senior secondary education at the SGGS Collegiate Public School, in Chandigarh, qualifying for the certificate examination in 2008. I started my undergraduate studies in 2009 in the Dept. of Metallurgical and Materials Engineering, Indian Institute of Technology, Kharagpur. At the same institute, I started my integrated master's studies in 2013 and received both B.Tech.(Hons.) and M.Tech.(Dual) degrees in 2014.

After getting selected in an industrial partnership programme (IPP) 'Computational Sciences for Energy Research' financed together by Shell India and the Netherlands Organization for Scientific Research (NWO), in 2014, I started my PhD in the Mechanical Metamaterials group of Prof. M.L. van Hecke, working mainly at AMOLF, Amsterdam, and occasionally at Leiden University. Under his supervision, I have spent the last four years conducting research on the computational design of mechanical metamaterials, the results of which have been compiled in this thesis. During these years, I also gained opportunities to attend several scientific events and conferences: Woudschoten Conference, Woudschoten (2015); Physics@Veldhoven, Veldhoven (2015, 2016, 2017); Casimir Spring School, Heeg (2016); CSER Future Energy Conference, Utrecht (2016); Annual CSER Meeting, Bangalore (2016); and APS March Meeting (Baltimore 2016, New Orleans 2017).

In October 2018, I started working as Data Science Researcher at Shell India, Bangalore.

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I personally want to express my gratefulness towards my family, in particular my parents, sister and younger cousin-brother. Learning in life never ends, however with this PhD, my formal education comes to an end. I would like to express my sincere gratitude towards all the teachers. Your conduct is inspiring and your contributions are precious.

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