

## *Magnets solve problems*

*by Dr. Xavier Martí, IGSresearch*

*15<sup>th</sup> march at 12.00h at Room 325 (3<sup>th</sup> Floor Faculty of Physics)*

It was a calmed evening and I was playing LEGO with my kids. The doorbell ringed and when I opened the door I heard something that made my day: “Xavi, I decided to come from Decin to tell you that I am very grateful for all the work you did, thanks to your technology our small family business can offer a better service and overcome the competitors”. Not only that: he gave me a huge box of premium Czech beer and left Prague with a big smile. My son asked me who that man was. I knelt down and I replied with the voice of the big occasions: “a happy customer” - something that does not manifest each and every day.

10 nanometer-thick, about 20 micron wide magnetic stripes, and a relativistic effect usually denoted as “negligible” are capable of this – and much more. But the transit from the blackboards to the published invoices has been a torture – and a pleasure. In the past 7 years I have been using magnets to solve problems ranging from geologic landslides monitoring in volcanic islands in the Atlantic to car parking in Quito, Ecuador. I had a unique opportunity to sit exactly where science and engineering/industry/business touch each other. I witnessed the weaknesses and the strengths of both sides when approaching “challenges”. How to arrange all our distinct and varied talents in order to progress as a society?

*[igsresearch.com/youtube](http://igsresearch.com/youtube)  
[igsresearch.com/spintronics](http://igsresearch.com/spintronics)*

### **Biography:**



Dr. Xavier Martí obtained a PhD in materials science in 2010 for his research work in Spintronics. While working at UC Berkeley, he boosted IGSresearch in order to use spintronics-based technology from the nanoscale up to geophysics. The devices manufactured by IGSresearch are installed nowadays in numerous locations from South America to Eastern Europe. He is co-author of over 80 scientific publications cited over 2000 times, and holds patents either as co-inventor or co-owner. In 2013, he co-founded the incubator Penyalab at Universitat de Barcelona.

He is a TEDx speaker and an enthusiastic science evangelist who has engaged over 35,000 followers in the web page "Magnets Solve Problems".

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