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IOP Research Student Conference Fund

"Report of Spintronics X, SPIE Optics + Photonics, San Diego, CA, USA."

Spintronics X formed part of the SPIE Optics and Photonics conference, San Diego (6-10/08/2017). The conference highlighted some of the most stimulating work emerging in the field of Spintronics. Topics covered a broad range of research areas from investigating the materials and spin dynamics in THz devices or following the development of neuromorphic inspired computing using spintronic nanodevices. Having had my paper ("Optimisation of Co_2MnSi:Pt multilayers for devices utilizing the spin Seebeck Effect") accepted as part of the Spin Seebeck Effects session, I stepped off the plane at San Diego full of anticipation for an exciting week ahead. The student program included a full day of workshops lead by Jean-Luc Dumont, of Principae, focused on building the leadership abilities of the SPIE Student officers. The diversity of the students from different backgrounds, degree levels and countries created a unique and inspiring atmosphere to allow me to develop leadership and problem-solving skills which will undoubtedly be highly beneficial for my fledgling academic career.

Sunday brought around the first day of the conference with the first keynote talk of the week from Michel Dyakonov, who along with V. Perel, published their paper on the prediction of the Spin Hall effect. Motivated by the research of such a longstanding member of the Spintronics community, the papers presented over the following few days included many exciting subjects. Of note was Andrew Berger's (NIST) presentation where he presented results on new method of analysis for FMR spin pumping measurements.

The international conference experience provided me with several opportunities to contact and discuss potential new research with students and academics alike from across the globe. The spintronics and magnetism community is certainly working on some groundbreaking research, of which I feel very privileged to be a part of.

I would like to thank the IOP for their generous grant which enabled me to present at this career-stimulating conference.

Yours Sincerely,

Chris Cox