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**Proximity effects in superconducting spin-valve structures**  
Flokstra, M.G.

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## List of Publications

1. R. S. Keizer, M. G. Flokstra, J. Aarts, and T. M. Klapwijk  
*Critical voltage of a mesoscopic superconductor*  
Phys. Rev. Lett. **96**, 147002 (2006)
2. M. Flokstra, J. Aarts  
*Domain-wall enhancement of superconductivity in superconductor/ferromagnet hybrids: Case of weak ferromagnets*  
Phys. Rev. B **80**, 144513 (2009)
3. M. Flokstra, J. M. v.d. Knaap and J. Aarts  
*Magnetic coupling in superconducting spin valves with strong ferromagnets*  
to be submitted to Phys. Rev. B
4. J. Aarts, C. Attanasio, C. Bell, C. Cirillo, M. Flokstra and J. M. v.d. Knaap  
*Superconductor / Ferromagnet hybrids : bilayers and spin switching*  
to appear in the Springer Series NanoScience and Technology  
(eds. V. Moshchalkov and R. Wördenweber).
5. R. S. Keizer, M. G. Flokstra, J. Aarts, and T. M. Klapwijk  
*Critical voltage of a mesoscopic superconductor between normal electrodes*  
Proceedings of the 24<sup>th</sup> international conference on low temperature physics,  
AIP Conference Proceedings 850, 755 (2006)



# Curriculum Vitae

## Machiel Flokstra

Born on the 10th of July 1979 in Oldenzaal, The Netherlands.

- 1991-1997 High school  
Thij college, Oldenzaal
- 1997-2003 M.Sc. Applied Physics  
Delft University of Technology.  
Graduate research in the group of prof.dr.ir. T.M. Klapwijk.  
Subject: Anomalous behavior in nano Schottky diodes
- 2004-2009 Ph.D. research at Universiteit Leiden  
Supervision by prof.dr. J Aarts  
Subject: Proximity effects in superconducting spin-valve structures



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With great pleasure I thank all of the MSM gang for the nice time we shared both in and out of the lab. In particular I want to thank Marcel Hesselberth for all the technical support and for keeping the sample fabrication facilities up and running... most of the time! Thanks to Chris Bell for pushing always enthusiastically for more measurements and to Jorina van der Knaap for helping me during my initial work on spin-valves. Thanks to Federica Galli for all the given compliments (and returning of lent items), to Carla Cirillo for sharing the "langzaam te leven" motto which became the start of many more office mottos. A big thanks goes to the Tibi-Taxi and both its chauffeurs, Oana and Tibi Sorop, it has been a place for physics discussions and, well, resting moments.

I have been very fortunate in collaborating with the muon crew at St Andrews: Stephen Lee, Stephen Lister, David Heron and Soumya Jyoti Ray. The muon experiments we did at the PSI facility were all a great experience, which also gave me a lot of enjoyment. Our humongous lunch in a (almost) deserted canteen and the limping shoulder are not easily forgotten.

During my PhD in Leiden I remained "faithful" to the flat in Delft where I lived as a student. I owe a lot of good moments to my flat mates Luc and Ruurd and also to our frequent visiting guests: Gerrit-Jan and Antonie, with whom we spend many weekends of overdosing on playing cards.

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