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Nano-scale electronic structure of strongly correlated electron systems

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Citation

Tromp, W. O. (2022, December 20). *Nano-scale electronic structure of strongly correlated electron systems*. *Casimir PhD Series*. Retrieved from <https://hdl.handle.net/1887/3503554>

Version: Publisher's Version

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Note: To cite this publication please use the final published version (if applicable).

Acknowledgements

No accomplishment is achieved alone, least of all a PhD. I am eternally grateful for all the people who made the work in this thesis possible and otherwise supported me over these years.

First of all I would like to thank my supervisor Milan Allan. Your keen insights and our discussions have provided me with invaluable teachings over the years. I would also like to thank Jan Aarts for keeping an eye out and for your experience, wisdom, and support.

I have had the pleasure of working together with amazing collaborators during my PhD. Firstly I would like to thank Felix Baumberger and Anna Tamai, who I got to know during my time as a MSc student with them, for the wonderful work we did on the Sr_2RhO_4 project. That project would also not have been possible without the indispensable insights of Robin Perry and Andrew Mackenzie. Our work on the cuprates would not have been possible without the strange metal consortium, which we had the pleasure to partake in. A special thanks goes to Jan Zaanen, Miguel Sulangi, Nigel Hussey, Steef Smit, Lewis Bawden, Erik van Heumen, Yingkai Huang, and Mark Golden for all the work we did together, for your thoughtful discussions, and your unparalleled knowledge of physics. The strange metal meetings discussing all the latest news and progress were truly inspirational.

I would also like to thank Sense-Jan van der Molen for our discussions and our work as the PhD platform together with Alessandra Silvestri, Thomas Schmidt, Celine Alkemade, Jeremy Ernst, Ludwig Hoffman, and Corné Koks. Special thanks also go out to Tjerk Oosterkamp for providing early guidance and embarking on the occasional musical adventure with me.

The research we do is simply impossible without the contributions of the support staff here in Leiden. The people of the FMD and the ELD with all the technical know-how, in particular Kees van Oosten, Gijbert Verdoes, Freek Groenewoud, and Hugo van Bohemen without whom the lab would crumble. I would also like to thank Wilfred van der Geest for providing us with liquid helium, even if it would mean overthrowing your schedule for us. Thanks go out to Ellie van Rijsewijk and Michelle Wijffe for your administrative support and the infinite patience you have shown me.

Life in the lab would not be possible without all the amazing members of the Allan lab. You have taught me all the lab skills I know, and were an endless source of laughs, fun, and support. I have nothing but fond memories of our time and nothing but my deepest gratitude to Irene Battisti, Koen Bastiaans, Doohee Cho, Maarten Leeuwenhoek, Damianos Chatzopoulos, Tjerk Benschop, Vincent Stalman, Jacky Ge, Jinwon Lee, Jiasen Niu, Amber Mozes, and Maialen Ortego. In the last year I had the pleasure to work again with Kaveh Lahabi on the hydrodynamics project showing me your infinite capacity for kindness and support. It's amazing to think this all started 6 years ago when I set foot in your lab as a BSc student. I also had the opportunity to supervise some great students during my PhD. Amber Vervloet, Evert Stolte, Thijs van Stralen, Jasper Steenbergen, Marijn van der Horst, and Ilse Kuijf. I can only hope you enjoyed our time as much as I have.

Over the course of my PhD I got to know some wonderful people who made LION into a wonderful place to be. A special thanks to Kaveh Lahabi, Tobias de Jong, Martin de Wit, Freek Hoekstra, Tim Fuchs, Norman Blümel, Jimi de Haan, Remko Fermin, Peter Neu, Guido Stam, Corné Koks and Sergi Campos Jara for bringing the institute to life. I would also like to thank Jelle, Freek, Auke, Lina, and Joël for setting the PhD experience to music.

Tenslotte wil ik mijn familie bedanken voor hun grenzeloze liefde en ondersteuning. Pa, Ma, Jan, ik mag me gelukkig prijzen met zulke geweldig ouders en broer op wie ik altijd kan rekenen.

Curriculum Vitae

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2016 – 2018 MSc. in Experimental Physics, Quantum Matter and Optics

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systems*” under supervision of dr. M.P. Allan

List of Publications

1. Edoardo Cappelli, Willem O. Tromp, Siobhan McKeown Walker, Anna Tamai, Marta Gilbert, Felix Baumberger and Flavio Y. Bruno, *A laser-ARPES study of LaNiO_3 thin films grown by sputter deposition*, *APL Materials* **8**, 051102 (2020).
2. Irene Battisti, Willem O. Tromp, Sara Riccò, Robin S. Perry, Andrew P. Mackenzie, Anna Tamai, Felix Baumberger and Milan P. Allan, *Direct Comparison of ARPES, STM, and quantum oscillation data for band structure determination in Sr_2RhO_4* , *npj Quantum Materials* **5**:91 (2020).
3. Koen M. Bastiaans, Damianos Chatzopoulos, Jian-Feng Ge, Doohee Cho, Willem O. Tromp, Jan M. van Ruitenbeek, Mark H. Fischer, Pieter J. de Visser, David J. Thoen, Eduard F.C. Driessen, Teunis M. Klapwijk and Milan P. Allan, *Direct evidence for Cooper pairing without spectral gap in a disordered superconductor above T_c* , *Science* **347**, 608-611 (2021)
4. Willem O. Tromp*, Tjerk Benschop*, Jian-Feng Ge, Irene Battisti, Koen M. Bastiaans, Damianos Chatzopoulos, Amber Vervloet, Steef Smit, Erik van Heumen, Mark S. Golden, Yingkai Huang, Takeshi Kondo, Yi Yin, Jennifer E. Hoffman, Miguel Antonio Sulangi, Jan Zaanen and Milan P. Allan, *Puddle formation, Persistent gaps, and non-mean-field breakdown of superconductivity in overdoped $(\text{Pb,Bi})_2\text{Sr}_2\text{CuO}_{6+\delta}$* , accepted in *Nature Materials*, arXiv:2005.09740 (2022)
5. Jian-Feng Ge, Koen M. Bastiaans, Damianos Chatzopoulos, Doohee Cho, Willem O. Tromp, Tjerk Benschop, Jiasen Niu, Genda Gu and Milan P. Allan, *Determination of the charge transfer when tunneling into putative Majorana modes in individual vortices in $\text{FeTe}_{0.55}\text{Se}_{0.45}$* under review, arXiv: 2205.10346 (2022)
6. Willem O. Tromp, Ilse Kuijff, Yingkai Huang, Mark S. Golden, and Milan P. Allan, *Quasi-particle interference in overdoped $(\text{Pb,Bi})_2\text{Sr}_2\text{CuO}_{6+\delta}$: Application of noise suppression through self-supervised machine learning*, in preparation

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