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University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

The Boolean

Volume 6, 2022



University College Cork
Ireland

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Introduction

Doctoral students produce original and publishable research, but often only those in their own specific disciplines have been able to access the publications arising out of the research, or are aware of the breadth of research being undertaken. A key aim of *The Boolean*, from its inception to the present day, has been to ensure that this research is accessible to the wider community, outside academia, including stakeholders and potential employers of UCC doctoral graduates. Doctoral researchers have had to adhere to the specific Guidelines for Authors, to adapt their writing to reflect this audience. Also, in order to be allowed to submit an article, authors had to agree also to review articles, gaining useful critical analysis skills in a discipline outside of their own.

The inaugural volume of The Boolean in 2010, was followed by another four volumes between 2010 and 2015. Similar to previous volumes, the 2022 issue of the relaunched *The Boolean*, provides a fascinating snapshot of just some of the diverse research being undertaken by doctoral students at UCC. However, it differs in one important fundamental aspect. Reflecting the increasing involvement of postgraduate research students at all levels in the University, the current volume has been a student-led initiative from the outset: From two doctoral students, Lorenzo Niemitz and Stephen Murphy contacting Prof. Alan Kelly (Dean at the time of the first three volumes) and me suggesting a new volume, to the establishment of a steering group, the setting up of a new digital platform, to the call, submission and review of manuscripts.

With 35 articles, on a diverse range of subjects, from *'Developing Potential in the Family Business - Learnings from a Queen Concert'* to *'Quantum Control: Teaching Schrödinger's Cat to Compute the Impossible'*, we hope that the current volume, will interest and inspire you.

Thank you to all who have made this volume possible, including authors, reviewers and supervisors.

Professor Ruth Ramsay
Dean of Graduate Studies

Acknowledgements

The relaunch of *The Boolean* postgraduate journal was made possible thanks to a sustained, university-wide effort over the past 18 months. As such, it not only represents a major success for postgraduate research at University College Cork, but is testament to the collaborative spirit, and extraordinary initiative of the university community.

Professor Ruth Ramsay and Professor Alan Kelly have sponsored this project from the outset, offering invaluable support and advice for which we cannot adequately express our gratitude. Without them, *The Boolean* would never have been revived, and so we would like to express our deepest appreciation to them.

This endeavour would not have been possible without the continued support of staff at the Boole Library. Thanks goes to Dr Eoghan Ó'Carragáin, now with the National Library of Ireland, who committed the full support of the Boole Library services to the project. Our eternal gratitude goes to our friend Paul Davidson who, along with Donna Ó'Doibhlin and Elizabeth Noonan, went above and beyond providing the essential support and guidance to host the journal using Open Journal Systems (OJS), and secure DOIs for each published article. We are also indebted to Professor Manfred Schewe and Dragan Miladinović for freely sharing their experiences of running the Scenario journal, also hosted through OJS.

We would also like to extend our sincere thanks to Adel Coleman of Graduate Attributes, who organised financial support for printing and logo design, as well as supporting the launch event. Many thanks to Carol Veiga from Student Recruitment for organising a dedicated section on *The Boolean* in the recent student prospectus.

Many more people have supported the project than we have space here to mention, but special thanks goes to Nicole Todd and Anna Hoffman as original steering group members; Professor Stefan Andersson-Engels for his advice and constant encouragement; Caitríona Tyndall, Michael Vaughan, and the many others who advised and assisted the project along the way.

Finally, special thanks goes to Dr Peter Flynn, who as the original curator of *The Boolean*, freely offered his time, advice, and enthusiasm as we set about reviving the journal in 2021.

With thanks,

The Boolean Team 2022

Conor O'Driscoll

Emmet Taylor

Gaston Cluzel

Lorenzo Niemitz

Melissa Meyer

Stephen Murphy

Vinay Kumar Reddy Cheemarla

List of Reviewers

The Boolean team would like to extend a special thanks to all of our reviewers from across the university who took part in this issue.

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