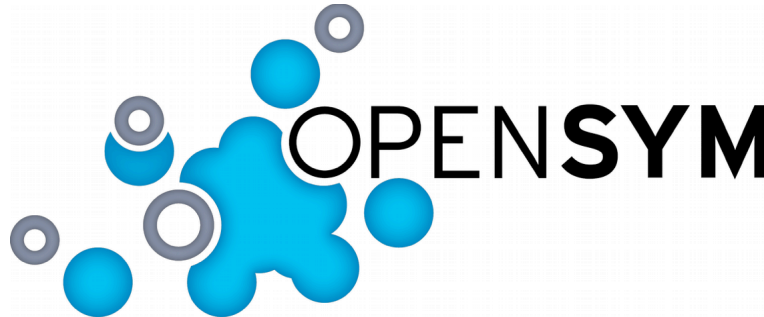


# Proceedings of the 13th International Symposium on Open Collaboration



**August 23-25, 2017**  
**Galway, Ireland**

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2 Penn Plaza, Suite 701  
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ACM ISBN: 978-1-4503-5417-2

# The 13th International Symposium on Open Collaboration

## Foreword

Welcome to the proceedings of OpenSym 2017, the 13th international symposium on open collaboration!

The companion comprises two main categories of contributions to the conference:

- Extended abstracts from the **doctoral symposium**
- **Industry and community contributions**

We would like to thank everyone for their contribution to the success of OpenSym!

We would like to thank our financial sponsors, **Science Foundation Ireland, Whitaker Institute, NUI Galway** and **The John Ernest Foundation**, our ACM in-cooperation partners **SIGWEB** and **SIGSOFT** and supporters, **the School of Business and Economics, NUI Galway, Lero, the Irish Software Research Centre** and **SIGOPEN, the Special Interest Group on Open Research and Practice**. Without their support and sponsorship, OpenSym 2017 would not have been possible!

We hope that you will enjoy the work presented here and that it provides you with a glimpse of the diversity and energy of the actual event!

For the OpenSym 2017 conference committee!

Lorraine Morgan

General Chair, OpenSym 2017

National University of Ireland Galway

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# The 13th International Symposium on Open Collaboration

## Conference Organization

### Overall Organization

Lorraine Morgan, National University of Ireland Galway (General Chair)

Eoin Cullina, National University of Ireland Galway (Operations Chair)

Denis Dennehy, National University of Ireland Galway (Proceedings Chair)

Mairead O'Connor, National University of Ireland Galway (Social Media Chair)

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Joe Feller, University College Cork

Matt Germonprez, University of Nebraska Omaha

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John McDonough, Fidelity Investments

### Program Chairs

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