# Academic practices in (community) innovation and (digital) fabrication

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#### **Abstract**

This workshop is intended to illustrate cases of Fab Labs, Makerspaces, Urban Labs and similar hubs at or in cooperation with academic institutions. Its goal is to provide a forum for discussing how such communities and spaces influence and are influenced by teaching, learning, research, outreach and dissemination as well as on challenges and perspectives in establishing, running and integrating such communities with other aspects of academic work.

## 1 Workshop Summary

This is a proposal for a workshop on "Academic practices, (community) innovation and (digital) fabrication" for the 2017 Mensch und Computer conference. Practices and developments around Fab Labs, Makerspaces, Urban Labs and similar hubs topics are developing in the wild, often in and with the involvement of universities. However, establishing and managing such open and interdisciplinary communities and somehow integrating them with a public institution - and, ideally, a non-academic population as well - can be rather challenging. There are no one-size-fits-all solutions to such challenges, yet, unfortunately, there are hardly any forums for exchange about said challenges, emerging governance practices, strategies, tools and stories. This workshop is an attempt at such a forum. Its intention is to provide space for discussion and sharing and its topical foci include - but are not limited to - case studies about developments in academic (fab) labs, makerspaces or other (open?) innovation and fabrication infrastructures, curricular and didactic implications / developments / cases / concepts, position papers, organizational or governance challenges and solutions, critique or "maker culture" and academia in general.

# 2. Workshop structure (half-day)

1. Introductory activity: Ideally hands-on, involving artifacts and maybe making something. Will be decided depending on group size and types of contribution. 2. Presentation and discussion of contributions. Presentation format will be Pecha Kucha in order to avoid "death by Powerpoint". There will be clear focus on discussion.

Platzhalter für DOI und ggf. Copyright Text. (Bitte nicht entfernen).

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3. Closing panel discussion: Workshop chairs, project members from FAB101<sup>1</sup> and selected authors from the contributing community.

### 3. Contributions:

- Position Papers (1-2p) outlining positions, stances and perspectives on community innovation and (digital) fabrication in and with academia.
- Case studies (2-4p) describing interesting, novel, provocative or otherwise relevant cases of community innovation and (digital) fabrication and academia.
- Free-form contributions: Your case is best presented in VR, milled in wood, expressed by art or 3D printed? We welcome creative contributions. A 150-word abstract and one photo, sketch or other publishable media is required.

Contributions will be solicited by way of a workshop website. We will aim for the workshop contributions to be published in the MuC proceedings and the workshop homepage as well as discuss potential other channels of publishing with the participants. The workshop organizers are quite interested in a follow-up and have project resources they can commit to working on continuation. The Journal of Peer Production, for example, has an upcoming Special Issue on the institutionalization of shared machine shops (meaning also community innovation and fabrication hubs) which could be followed up by the results of our workshop. This workshop proposal is also part of a series of related workshops<sup>2</sup> which will be hosted co-located with different events through the course of project FAB101.

## 2 People and audience

All authors run / work in / have founded fabrication- and community-oriented hubs from within their respective academic institutions and work with them in research and teaching. All have extensive networks of people with related (yet differently contextualized) experiences as well as research projects centered on innovation and digital fabrication who will be invited to contribute to the workshop as will networks such as the "Verbund offener Werkstätten", the Fab Foundation, contacts working in industry labs and others. However, the core audience of this workshop is intended to be researchers and other staff or students at universities working in or with community innovation and/or fabrication communities. MuC was specifically chosen for this workshop proposal because of its reach within the German HCI- and CSCW-community. From a practical point of view, federal laws, rules for public institutions and many unwritten aspects are localized, so a focused workshop at a German conference makes sense. However, the language for submissions is English in order to ensure international comparability and to be as useful for other researchers as possible.

<sup>&</sup>lt;sup>1</sup> FAB101 is a three-year research project on Fab Labs in academic education (project start 03/2017). Partners include Uni Siegen (coordinator), RWTH Aachen, Uni Bremen and Folkwang University.

<sup>&</sup>lt;sup>2</sup> Consisting of this workshop proposal and an accepted workshop on "3D printing/digital fabrication for education and the common good" at the C&T 2017: <a href="http://www.digifab-commongood.fab101.de/">http://www.digifab-commongood.fab101.de/</a>