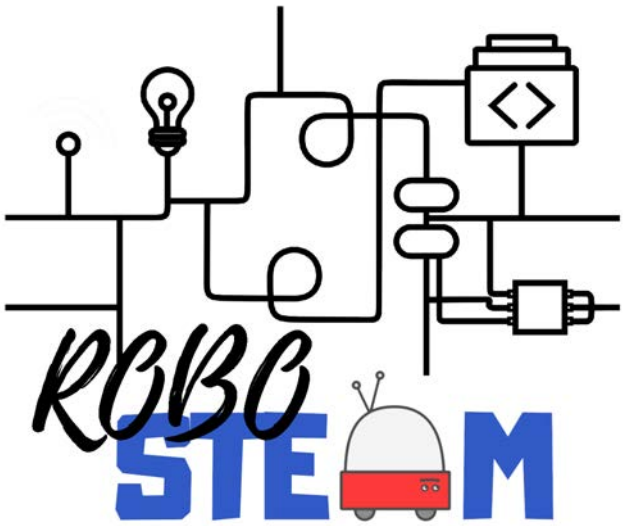
RoboSTEAM User Manual – O3.A3



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1.0	30/10/2019	Full manual version

Table of Contents

1. O3. A3

This document describes part of the work of the Output 3 – RoboSTEAM Environment. The output aims to define an educational environment which will offer to schools and teachers a complete set of tools, activities, guides and support to manage the implementation of STEAM challenges. An important part of this output is to describe how to use the system. This is done through a user manual. The definition of this user manual is described as follows:

- "Collection of multimedia, video and HTML guidelines and tutorials for the use of the system. Special attention to accessibility requirements will be paid to facilitate the use of the environment to any user, regardless his/her technical expertise and/or eventual disabilities. These materials will be accessible in their own contexts as "help tips", but also in a specific section.
- Complete User Manual for teaching staff and students".

2. RoboSTEAM Environment

The O3.A1 is devoted to design and implement a virtual environment, which means the technological ecosystem [1-5] for RoboSTEAM project [6, 7].

The RoboSTEAM technological ecosystem architecture is presented in Figure 1.

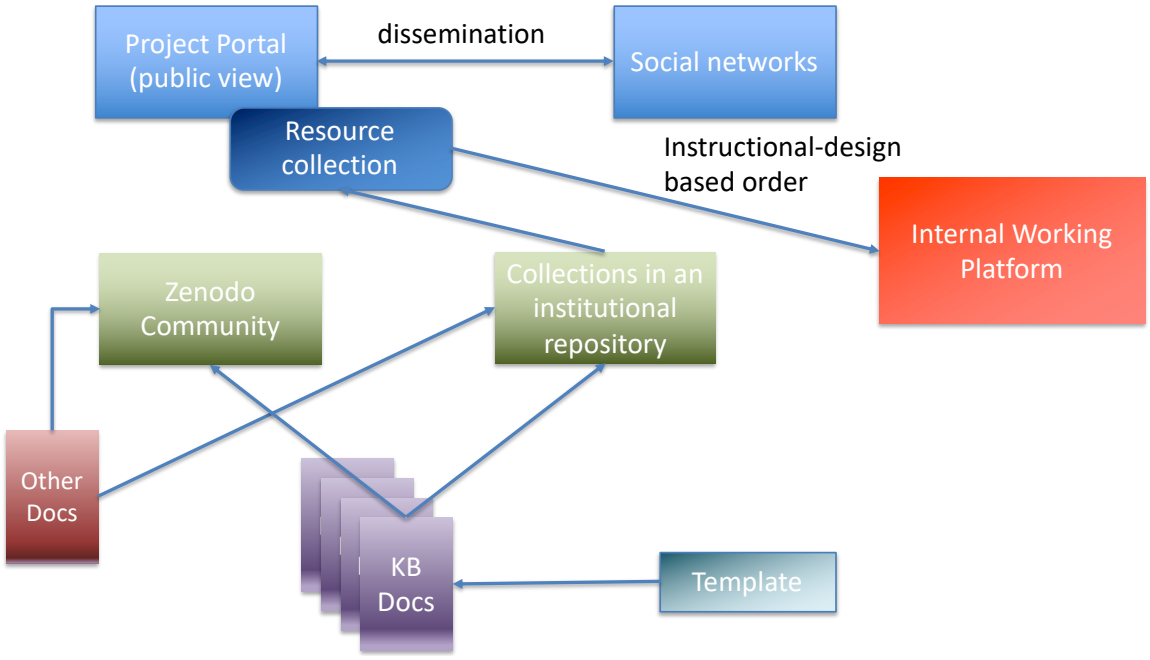

Figure 1. RoboSTEAM technological ecosystem architecture. Source: Based on [8]

3. RoboSTEAM Environment Manual

3.1. RoboSTEAM website

This is the public website of the RoboSTEAM project available at http://robosteamproject.eu/ (see Figure 2). It is designed following the one-page metaphor and has links to the other main components of the technological ecosystem.

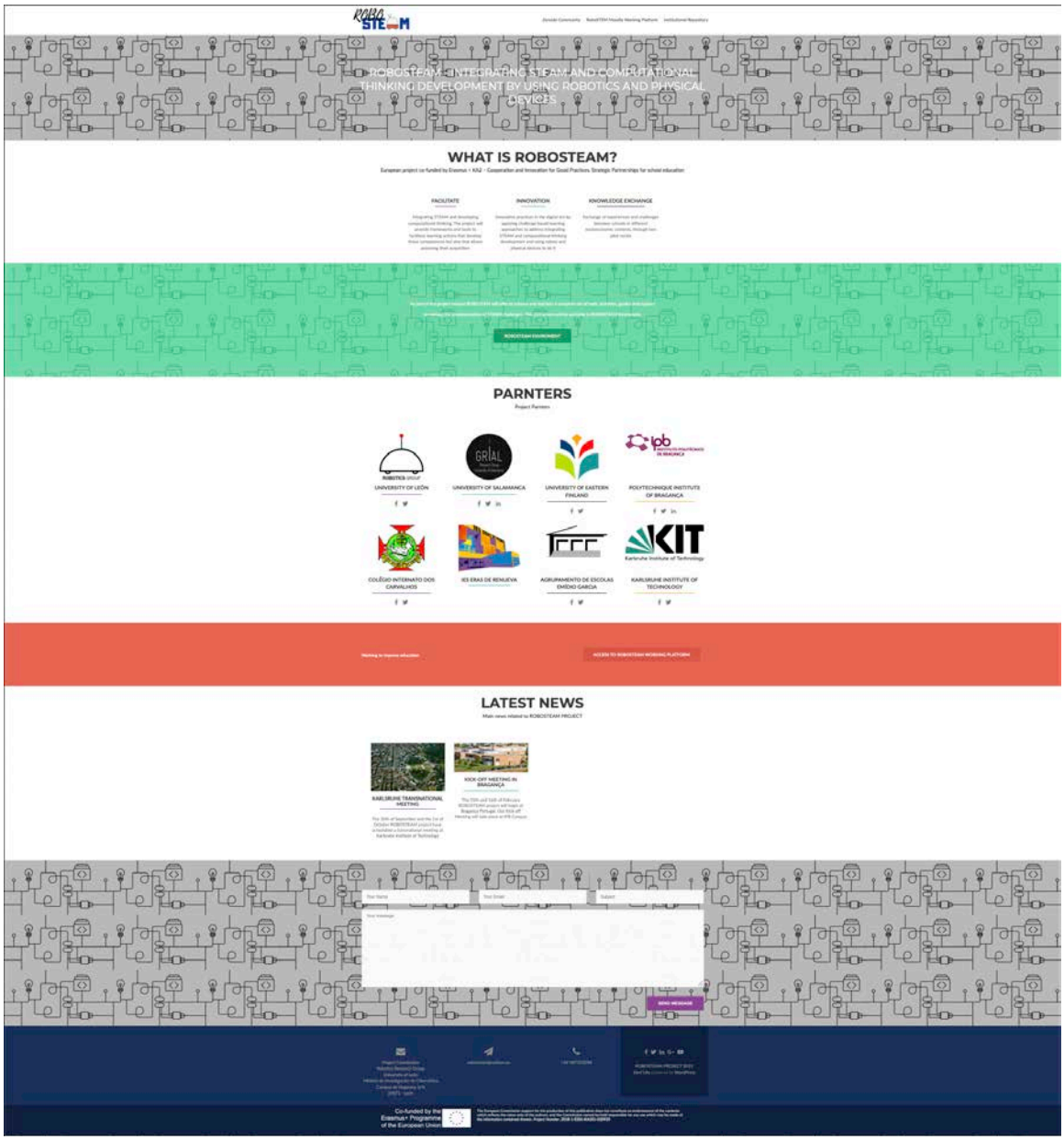

Figure 2. RoboSTEAM web site. Source: http://robosteamproject.eu/

3.2. RoboSTEAM internal working platform

It is the system for internal communication for the project partner and is based on a Moodle Learning Management System. This platform is accessible throughout the project website or directly throughout the URL http://robosteamproject.eu/moodle/.

This is not a public-accessible site, this means that only the registered users from every partner will have access through user and password (see Figure 3).

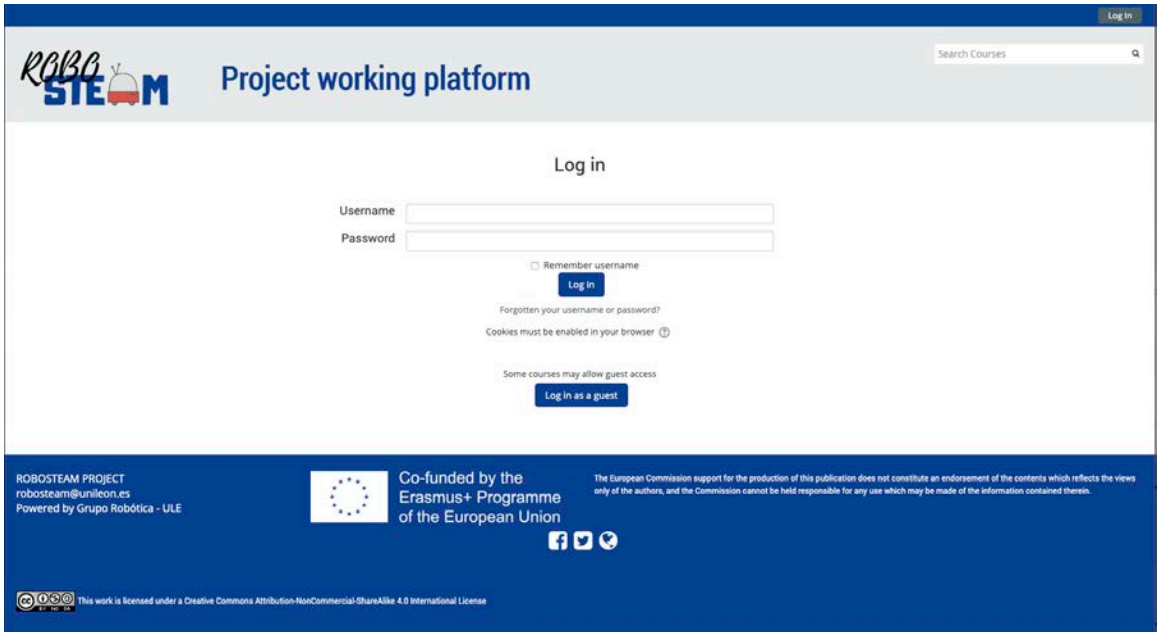

Figure 3. Login page of the RoboSTEAM internal working platform. Source: http://robosteamproject.eu/moodle/

Once the users are authenticated in the system, they have access to the project documentation, forum threats and pending tasks (see Figure 4).

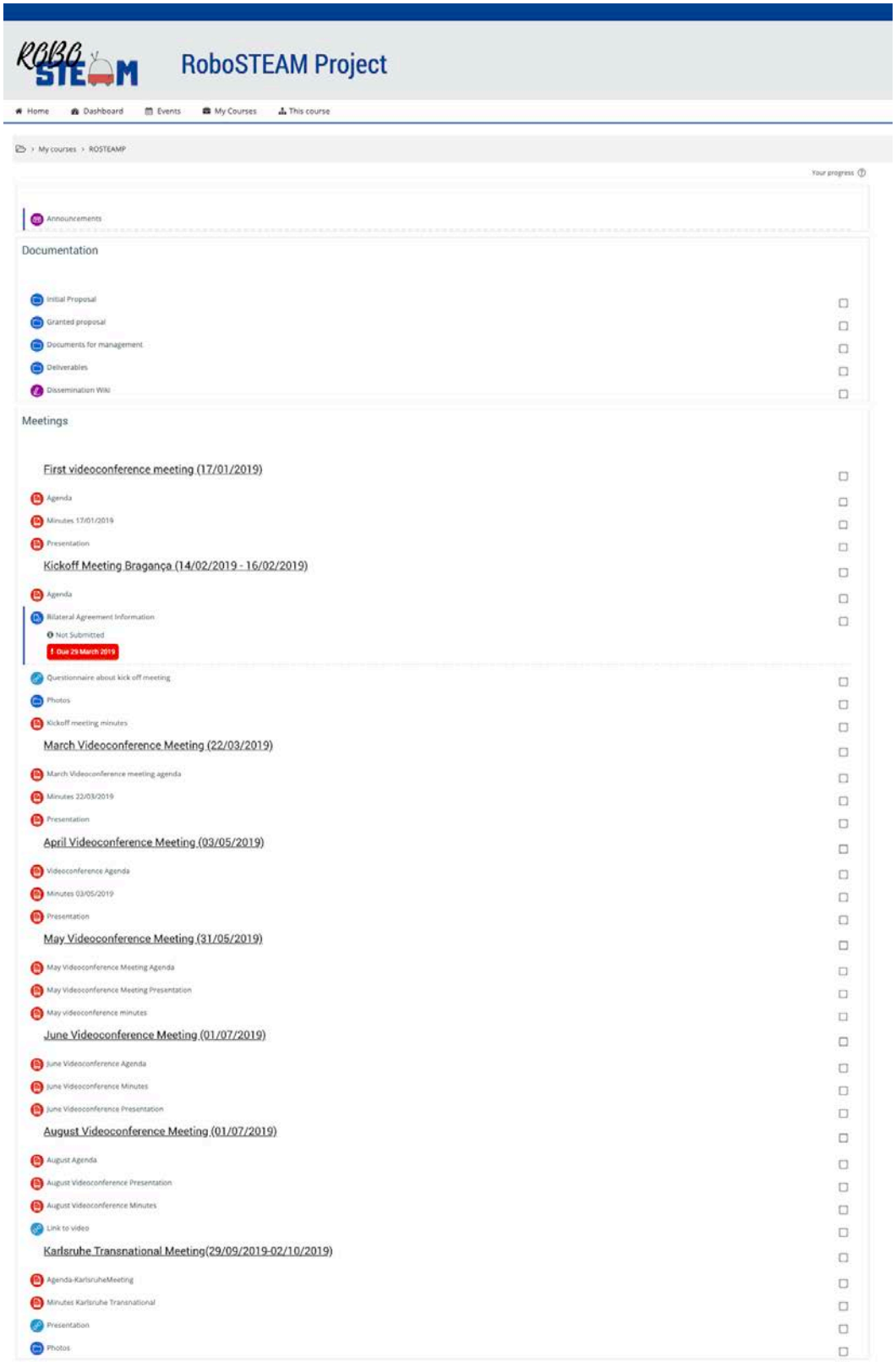

Figure 4. RoboSTEAM internal working platform

3.3. RoboSTEAM community in Zenodo

A public community has been set up in Zenodo (https://zenodo.org). This community is accessible at https://zenodo.org/communities/robosteam/ (see Figure 5) or throughout the project website.

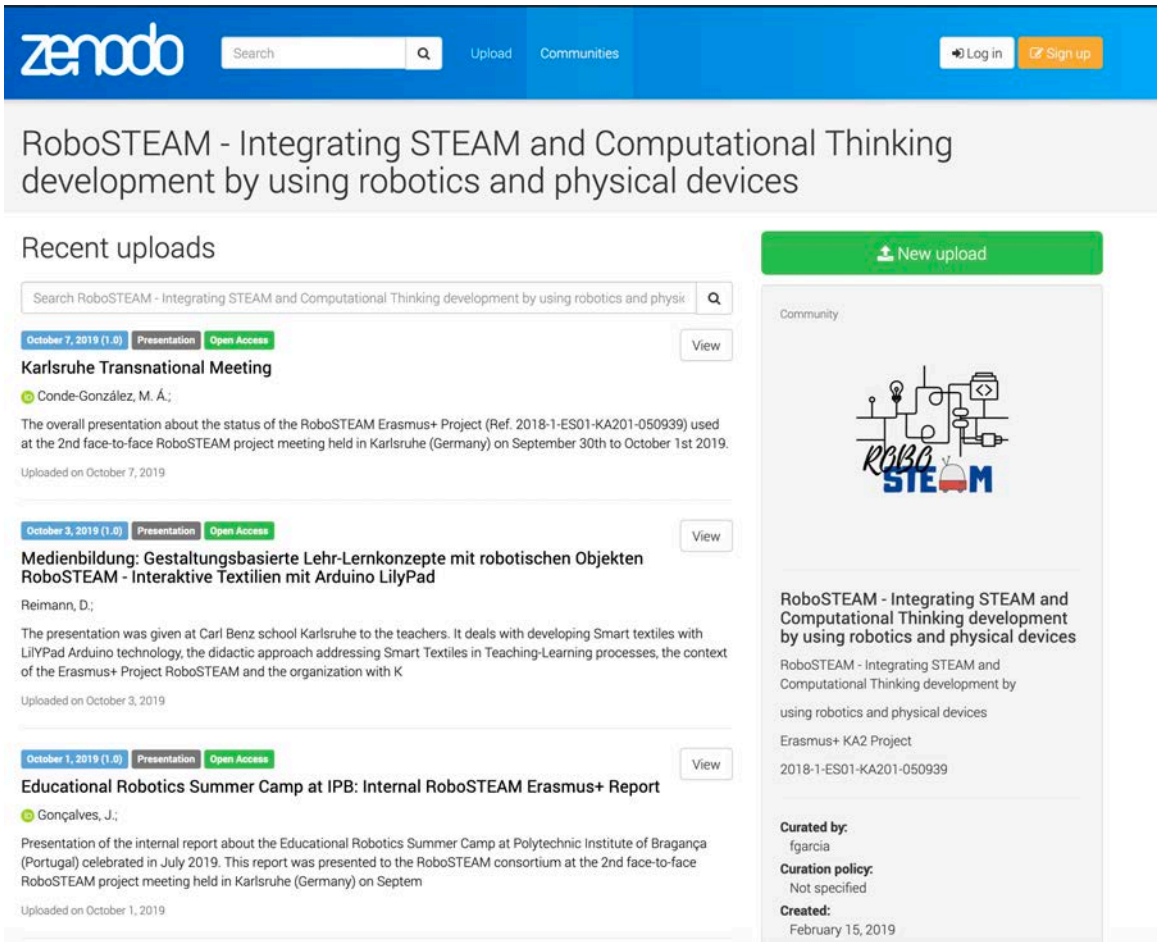

Figure 5. RoboSTEAM community in Zenodo. Source: https://zenodo.org/communities/robosteam/

The goal of this community is sharing all the documents and outcomes of the RoboSTEAM project. RoboSTEAM follows the principles of the open knowledge movement and open science policies [9, 10].

Figure 6 shows a RoboSTEAM register in the Zenodo community.

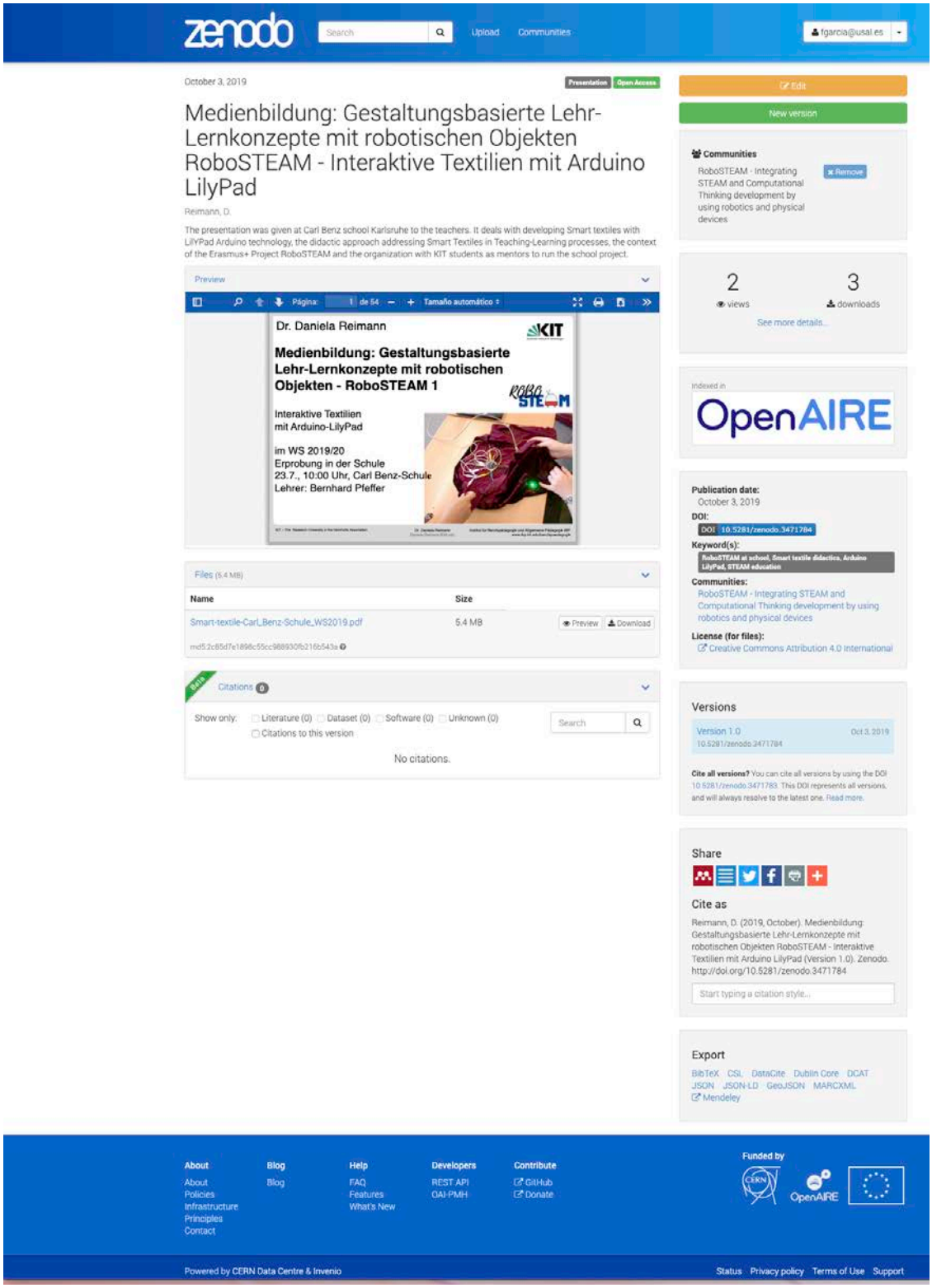

Figure 6. RoboSTEAM register in Zenodo community. Source: https://zenodo.org/record/3471784#.XbhoBUVKils

The information about the community could be edited by the admin of this community at https://zenodo.org/communities/robosteam/edit/ (see Figure 7).

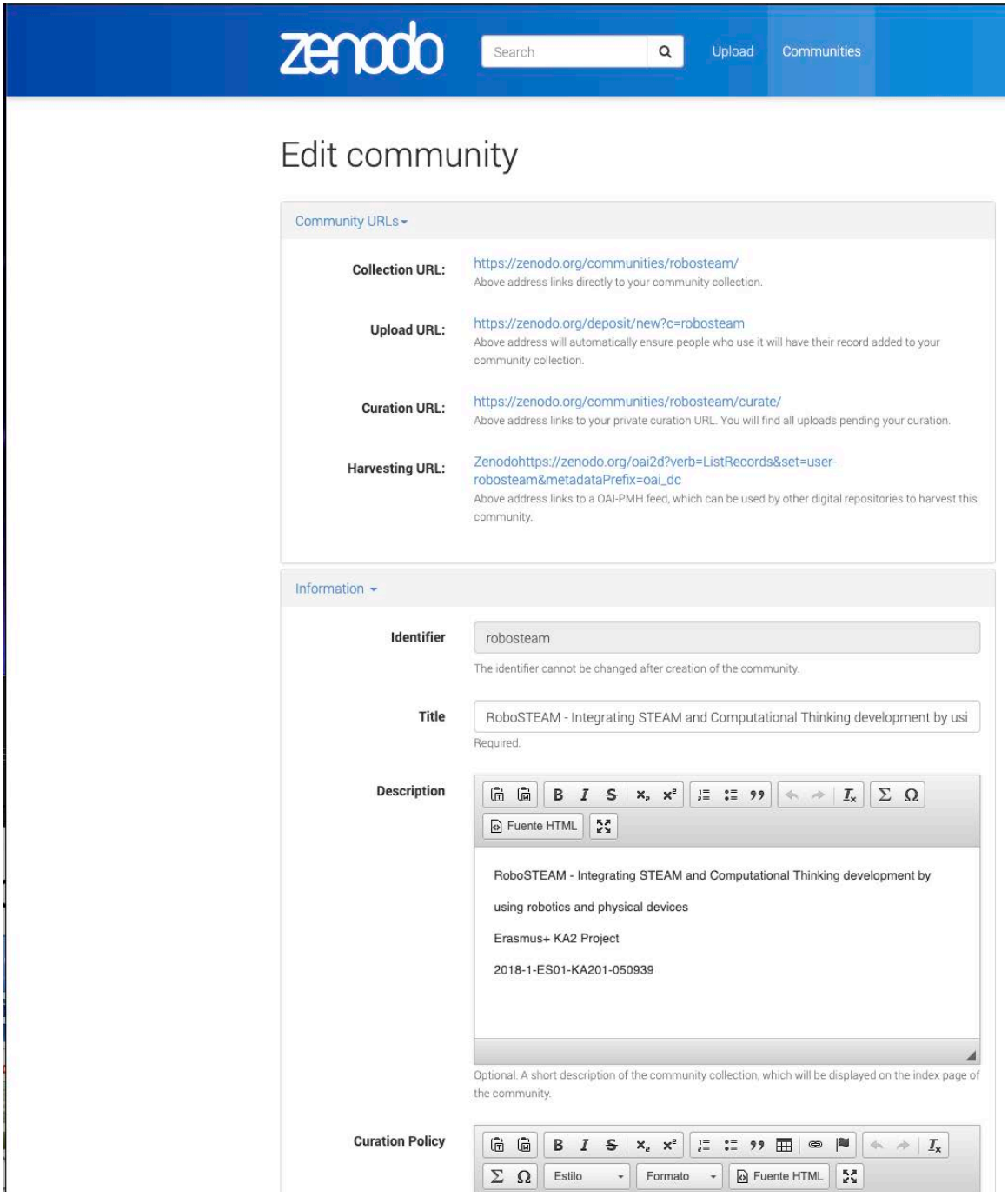

Figure 7. RoboSTEAM community metadata. Source: https://zenodo.org/communities/robosteam/edit/

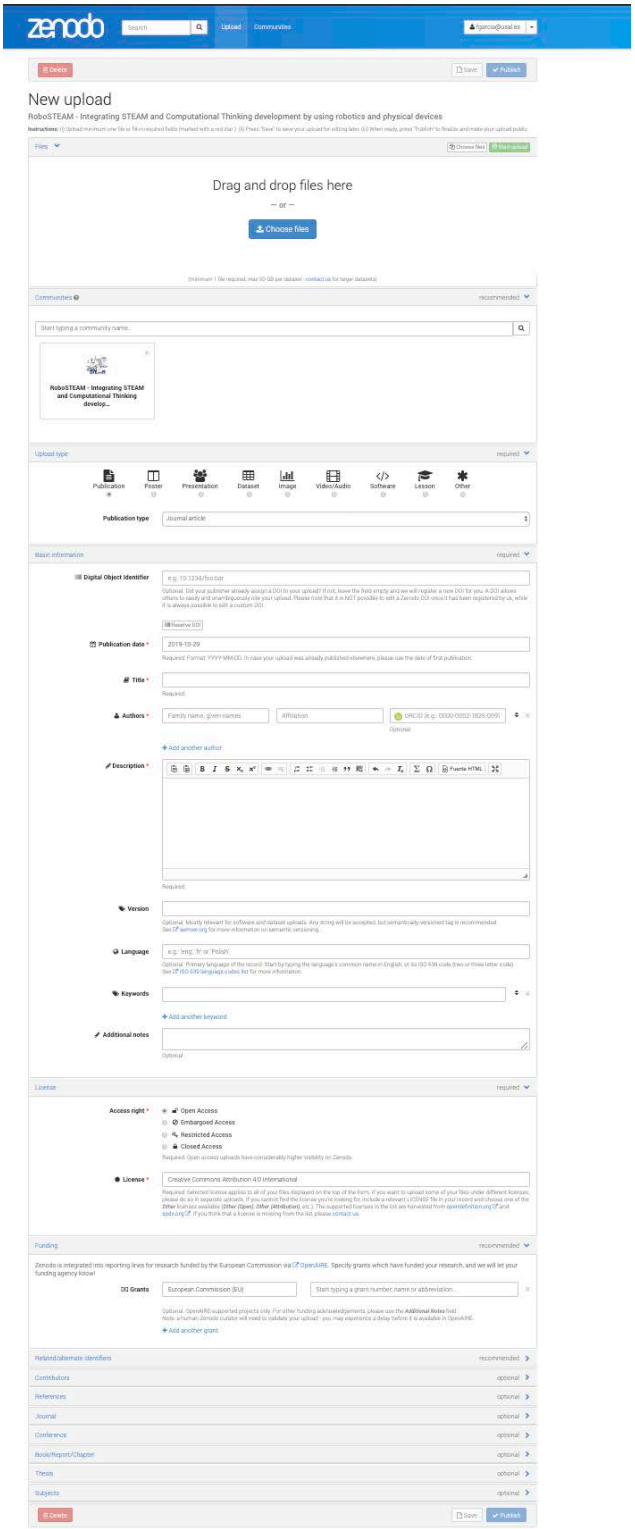

Figure 8. RoboSTEAM community empty upload form. Source: https://zenodo.org/deposit/new?c=robosteam

The upload of a new item in the community may be done by every person, but the uploads must be confirmed by the admin of the community. To do that, the user might access to the upload form through the "New Upload" button in the community page (see Figure 6) or directly throughout the URL https://zenodo.org/deposit/new?c=robosteam.

Figure 8 shows an empty upload form and figure 9- an example of a new resource that will be uploaded, specifically a post-print of this conference paper [11], following this procedure:

1) Drag and drop the pdf file containing the post-print version of the paper (Figure 9).

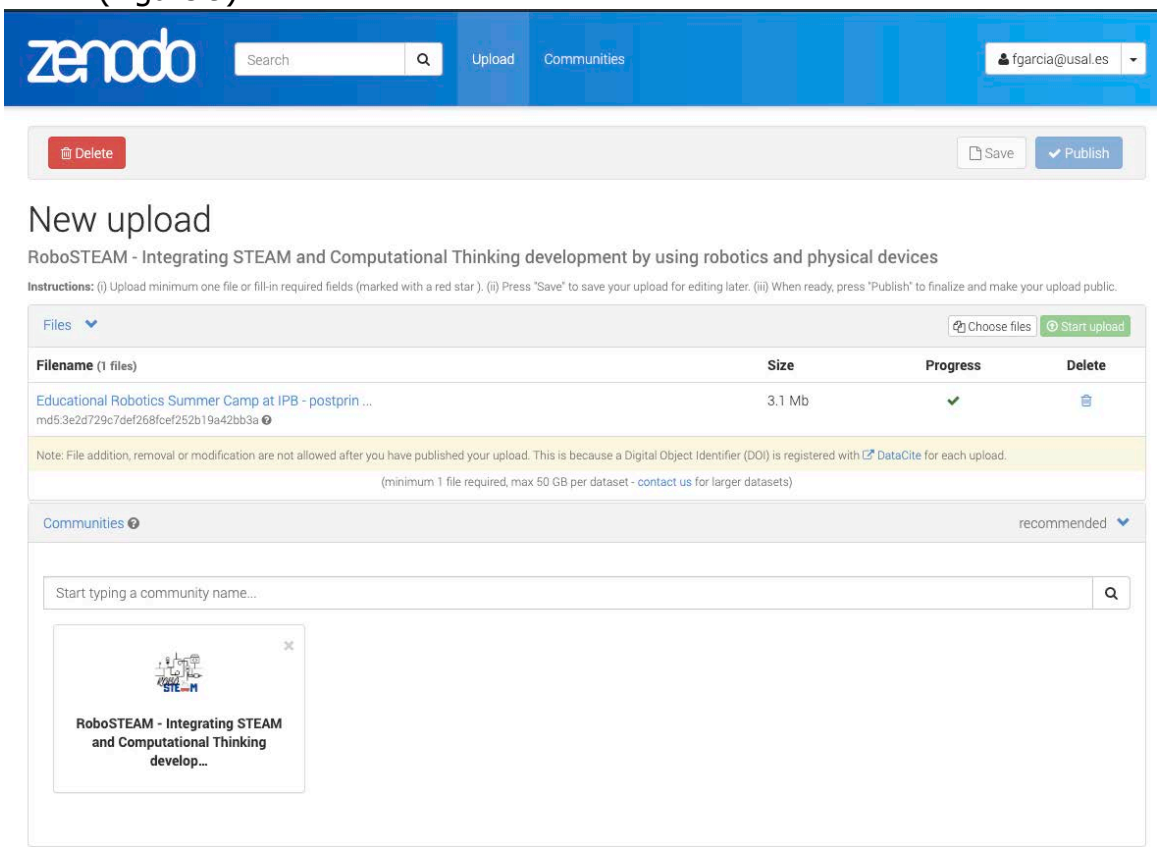

Figure 9. Uploading the pdf file

2) Select the type of the document, a conference paper in this case (Figure 10).

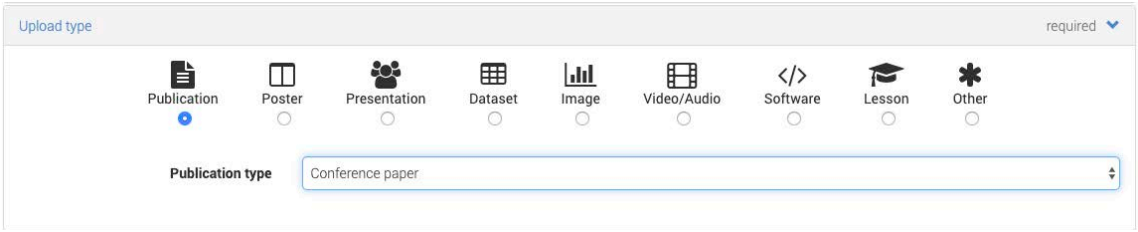

Figure 10. Selecting the document type

3) Fill the basic metadata of the source (Figure 11).

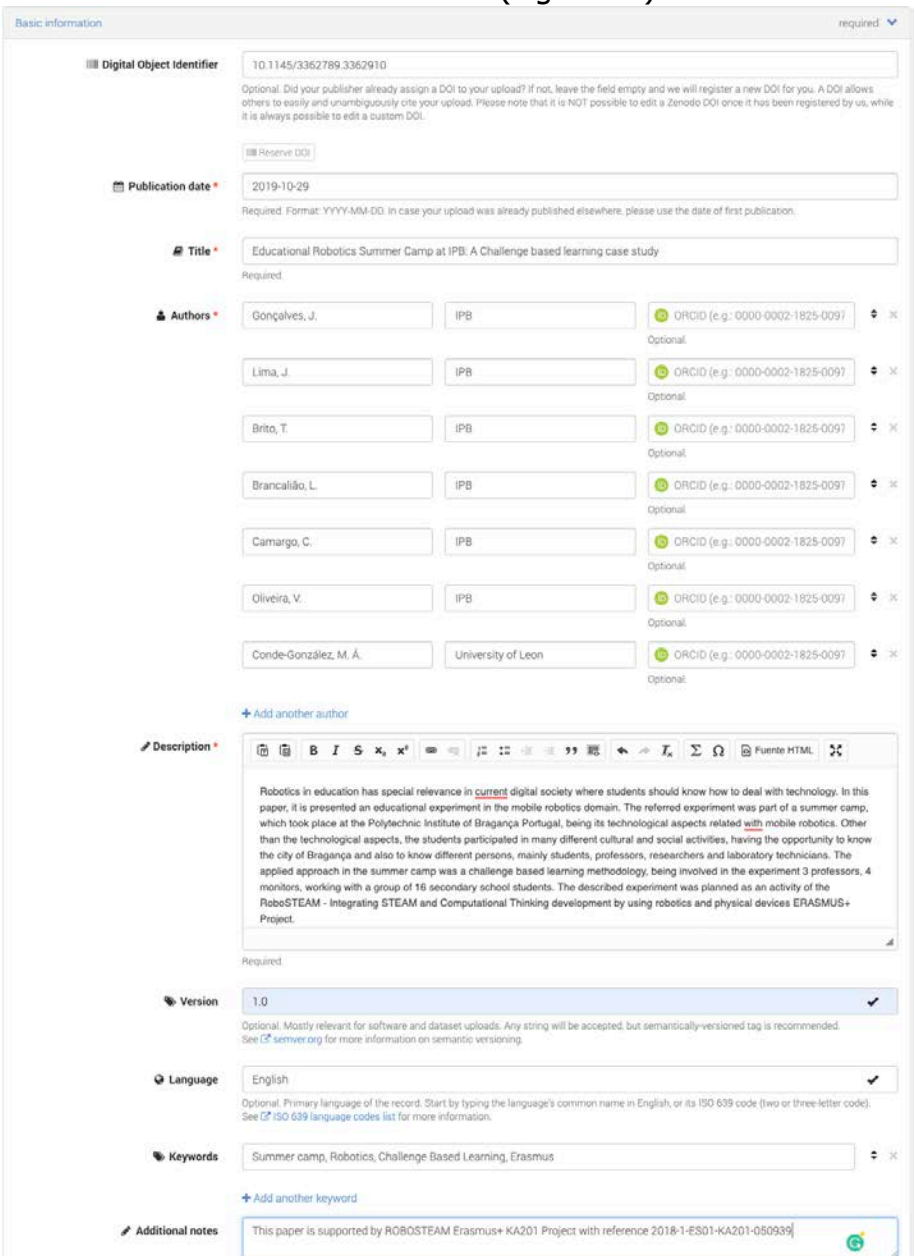

Figure 11. Introducing the document metadata

4) Choose the licence (Figure 12).

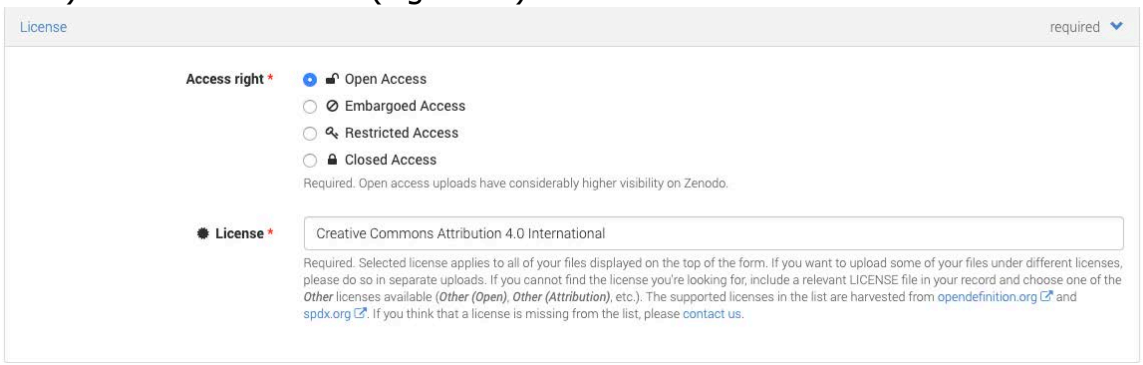

Figure 12. Choosing the license

5) Save (Figure 13).

Figure 13. Saving the changes

6) Publish the document (Figure 14).

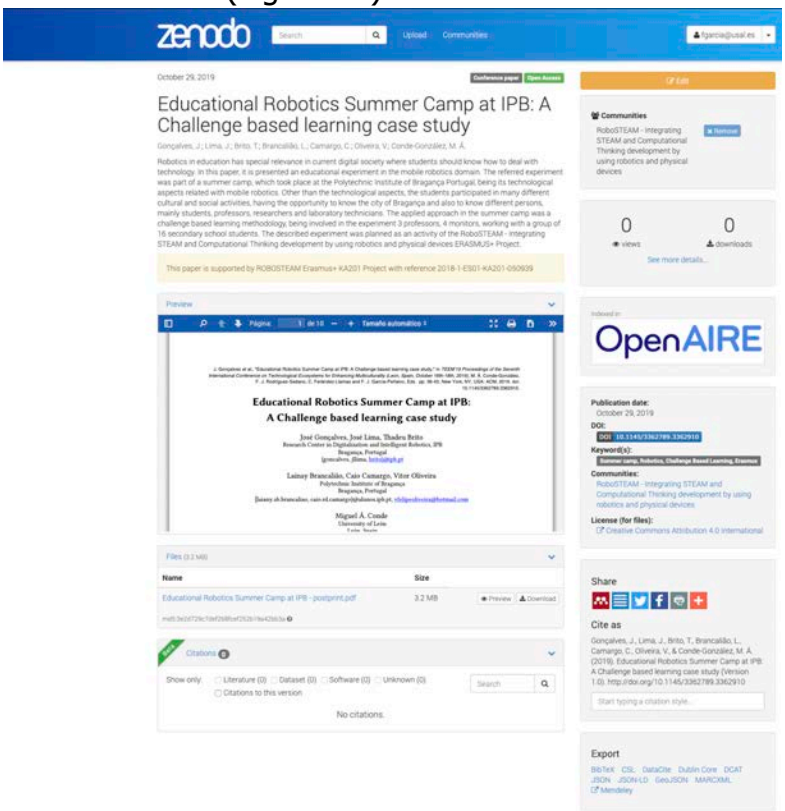

Figure 14. The published resource in RoboSTEAM community open accessible

3.4. Community in an institutional repository

Besides the Zenodo community, a community in the GRIAL research institutional repository (https://repositorio.grial.eu) has also been set up. This redundancy helps to disseminate the RoboSTEAM production to every place due to this repository is harvested by Google Scholar.

This community is accessible throughout the URL https://repositorio.grial.eu/handle/grial/1519 (see Figure 15).

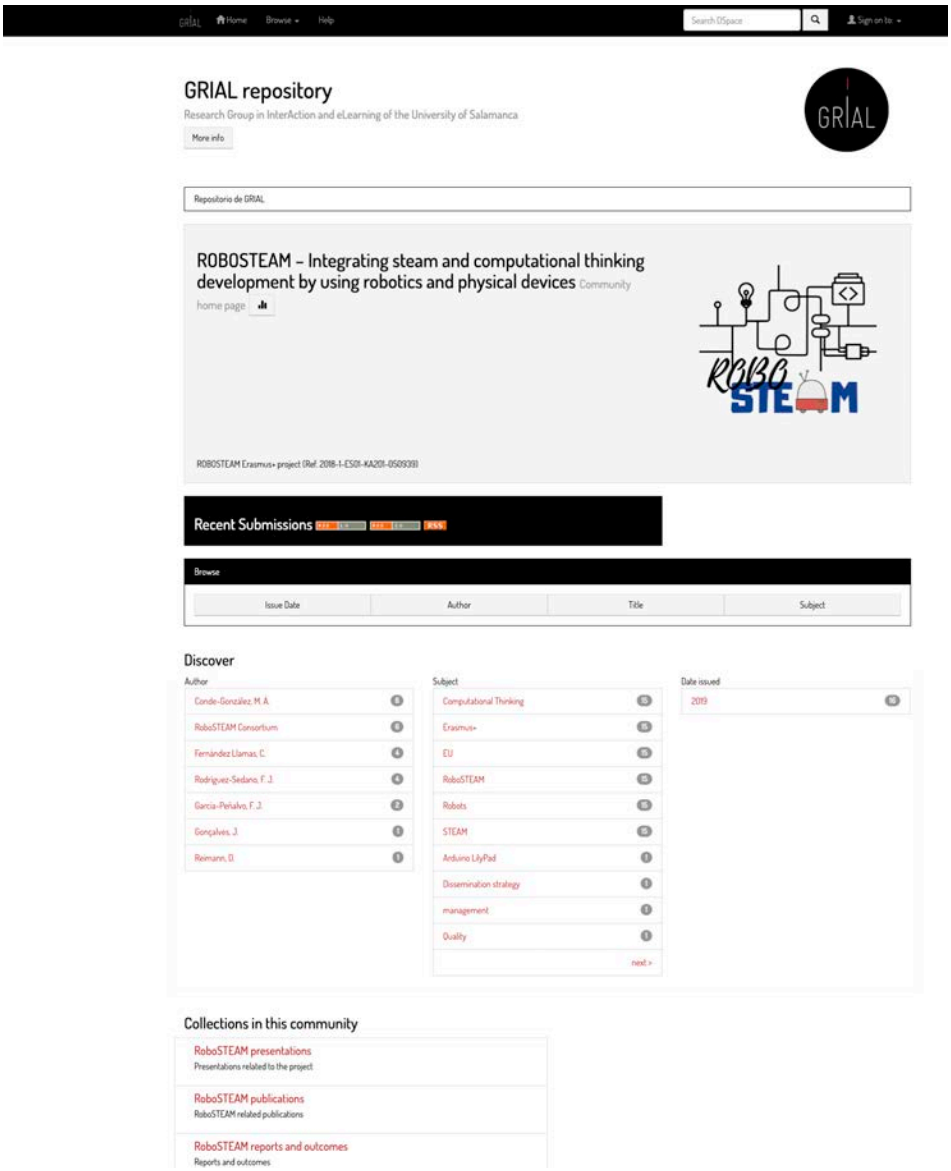

Figure 15. RoboSTEAM community in GRIAL repository. Source: https://repositorio.grial.eu/handle/grial/1519

This collection has been split in different collections to organize better the project outcomes and documents, for example, Figure 16 shows the Presentations Collection.

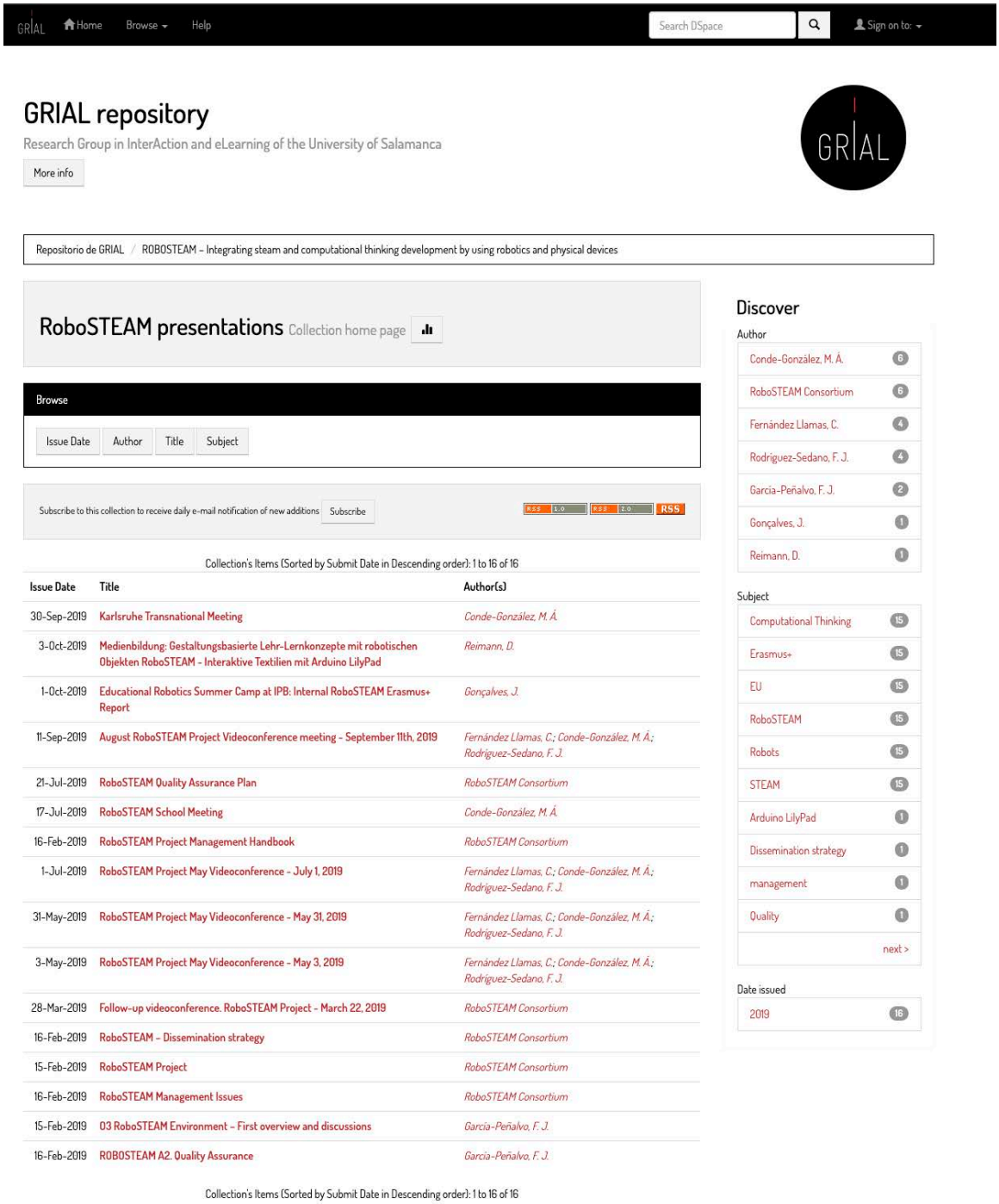

Figure 16. RoboSTEAM Presentations Collection in GRIAL repository. Source: https://repositorio.grial.eu/handle/grial/1520

4. Acknowledgements

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5. References

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