Making online mathematics conferences accessible to people with sensory disabilities

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INTRODUCTION

The aim of this poster is to showcase a project run by Dr Nina Otter through her charity for the democratisation of science https://demos-institute.org on collecting resources to make mathematics conferences better suited to people with sensory disabilities. One of the outcome of the project is to create guidelines for conference organisers, such as the ICMS (International Centre for Mathematical Sciences) in Edinburgh. Nina has also used her knowledge and insight to teach about accessible visualisations to the students in her Data Analytics MSc module Storing, Manipulating and Visualising Data, in collaboration with Dr Primoz Skraba.

QM PRINCIPLES FOR INCLUSIVE CURRICULUM

1. Empower
2. Co-Create
3. Diversify
4. Enable
5. Develop
6. Reflect
7. Value
8. Encourage

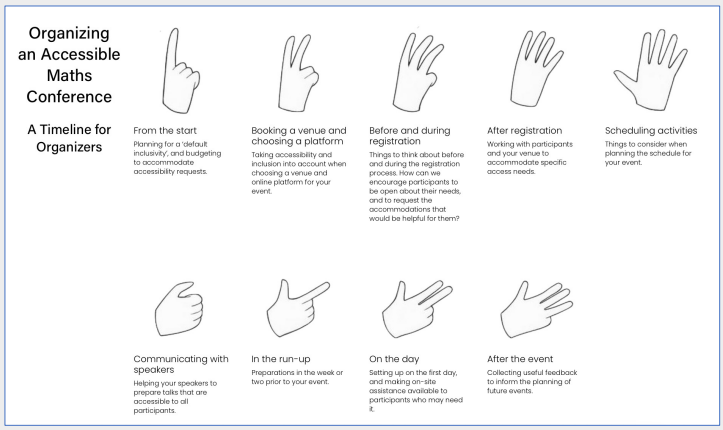
Inclusivity in mathematics conferences: questions

Since the beginning of the pandemic it has become common to organise mathematics conference online or in hybrid form.
Dr Nina Otter has posed herself and her collaborators in the charity for the democratisation of science (DeMoS), the following questions:

- **Are online mathematics conferences truly inclusive?**
- **Are there specific challenges associated to the field of mathematics?**
- **Are there software which can recognise mathematics formulas for visually impaired people?**
- **How can we make mathematics online conferences accessible to people with sensory disabilities?**

Inclusivity in mathematics conferences: some answers

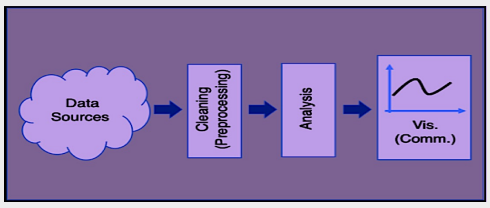
Dr Nina Otter is collecting resources to share with conference organisers. There have been recent efforts by the American Mathematical Society on how to move mathematics lectures online while making them accessible to people with sensory disabilities. See an example of Nina's work below.



DA MSc Module on Storing Manipulating and Visualising Data

Dr Nina Otter is using her knowledge and insight to teach about accessible visualisation to her Data Analytics MSc students in the module Storing, Manipulating and Visualising Data, in collaboration with Dr Primoz Skraba.

Well-designed visual representations can replace cognitive calculations with simple perceptual inferences and improve comprehension, memory, and decision making.
By making data more accessible and appealing, visual representations may also help engage more diverse audiences in exploration and analysis. The challenge is to create effective and engaging visualizations that are appropriate to the data.



Thanks to

Dr Nina Otter

Dr Primoz Skraba