IOP Publishing

Presentation of digital mathematical content: A publisher's perspective

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The *status quo*

- **Online content is an electronic version of the print article**
  - Articles delivered using HTML + PDF
  - Equations rendered as GIF images with LaTeX alt-text

The future

- **Making mathematical content more accessible, in terms of**
  - WCAG 2.0
  - Greater granularity of content delivery
  - Semantic search
- **Publishing in other formats and on other platforms**
  - Delivering platform-independent digital content e.g. epub

Problems

- **Display**
  - Image-based

    Delivering + scaling images to match font size

    SVG – plug-in dependency and processing overheads

    Breaking of multi-line equations

    Alignment of images – in-line and displayed equations

  - Font-based

    Dependence on availability of fonts at user's device

- **Print**

    Ensuring print version of digital document represents the science accurately

Problems

- **Accessibility**

  - Making content available to screenreaders, braille devices etc.

- **Semantic accessibility**

  - Which format to deliver content in?

    TeX / LaTeX, MathType, MathML,OpenMath…