

The future is near: Universally Usable Mainstream on-Line Publishing

Robert Kelly

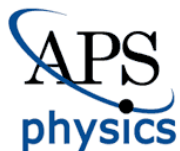
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Traditional Article Components

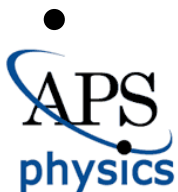
- **Text, Equations (complex) and Graphics**
- **Good for reading and searching, not for blind or dyslexic users**
- **The challenge is to produce articles so that they are reusable – “write once – reuse many”**
- **Today**
 - **Text in XML – Good for accessibility, navigation**
 - **Math in MathML – For display**
 - **Graphics in PostScript - For Display**

Challenge's to Re-usability

- Text in XML –
 - for accessibility, navigation
- Math in MathML –
 - For display – make accessible – Math Reader
- Graphics in PostScript
 - For Display - Text not XML
 - Make accessible – SVG – Text in XML

APS

- Currently all journals are MathML & XML
- Using Microformats & RSS
- Plans in place to use RDF and Personalization (FOAF)
- Project to enable accessibility of APS articles for the blind and dyslectic
 - DAISY Reader



Enhanced Reading Partners

- American Physical Society
- ViewPlus Technologies
- American Institute of Physics
- Beacon PMG
- Aptara
- Portico



Major Components

- APS/AIP/Beacon PMG and Aptara – Compose APS articles in a **cost effective** manner yielding reusable XML, MathML and Figures that can be transformed, via XLST, to DAISY
- DAISY Reader capable of XML, MathML and SVG
- Math Player
- ViewPlus – develop tools to enable MathML and SVG
- Portico - Archivability

Challenges

- Develop tools and relationships to enrich current articles for accessibility via the DAISY Reader.
- Modify current XML/ MathML and graphics composition process in a **cost effective** manner.
 - Current deliverables – capturing text from author supplied figures
 - Ingest publisher provided information

Rewards

- **Cost efficient process** to introduce additional content – enhance value of a subscription
- Attractive to Authors – increased visibility of their work

Closing

- Write once – reuse many policy insures content consistency across deliverables
- Article elements with an xml component provides for a multi use capability
 - Including the addition of information not supplied by an author

Thanks

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