TUG 2021 — Online — August 5-8, 2021

The forty-second annual TUG conference https://tug.org/2021 • tug2021@tug.org

Conference committee

Jennifer Claudio Rohit Goswami Steve Grathwohl Jim Hefferon Tom Hejda Jérémy Just Robin Laakso Ross Moore Norbert Preining Will Robertson Arthur Rosendahl, co-principal organizer Paulo Ney de Souza, co-principal organizer

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Thanks to all!



Boris Veytsman Alan Wetmore









EXFolio TEXNOLOGY INC



TUG 2021 program

(All times and days listed are UTC.)

Thursday August 5

16:00 Cheryl Ponchin, IDA/CCR-P; Sue DeMeritt, IDA/CCR-La Jolla

Workshop: Introduction to I₄T_EX

18:00 Emílio Kavamura, Univ. Federal do Paraná Workshop: Graphics with PGFPlots—in Portuguese

20:00 Alexánder Borbón Alpízar, El Tecnológico de Costa Rico

Workshop: Introduction to I₄T_FX — in Spanish

(continued)

$\mathbf{TUG~2021~program}~(\mathrm{continued})$

Friday August 6	16:00	Simon Porter, Digital Science	Data-driven documents using Jupyter Notebooks and Overleaf
	16:45	Amelia Hugill-Fontanel, Cary Graphic Arts Collection	Cary Graphic Arts Collection Pressroom tour
	17:45	Paulo Ney de Souza, BooksInBytes	Producing a book for Amazon KDP
		David Crossland, Google	Variable fonts
	21:15	Matheus Rocha	How to make a logo/symbol for a font
	22:00	Oliver Austin, San Jose, CA	Plane and simple: Exploration of machine interaction with text type for visual based navigation systems
	23:30	Vafa Khalighi	Persian typesetting in TEX: Past, present, and future
Saturday	00:15	Norbert Preining, Fujitsu Research	Interview, conducted by Paulo Ney de Souza
August 7	06:15	Aravind Rajendran, Rishi T, Apu V, Rahul Krishnan S, STM Document Engineering	How a L⁴TEX-based company lived through a modern day pandemic
	07:00	Martin Ruckert, Hochschule München	The WEB to CWEB conversion of T_{EX}
	07:45	Vít Novotný, Masaryk Univ.	Markdown 2.10.0: LATEX themes & snippets, two flavors of comments, and LuaMetaTEX
	08:30	Rohit Goswami, Univ. of Iceland	Continuous integration and TEX with Org-Mode
	10:00	Andreas Papasalouros, Antonis Tsolomitis, Univ. of the Aegean	latex2nemeth: A direct LATEX-to-Braille transcribing tool
	10:45	Ulrike Fischer, LATEX Project	On the road to tagged PDF: about StructElem, Marked Content, PDF/A and squeezed Bärs
	11:30	Frank Mittelbach, LATEX Project	Taming the beast—Advances in paragraph tagging with pdfTEX and XTTEX
	12:15	Jonathan Fine, Retired, Open Univ., UK	Code and math in the dark
	14:00	Paulo Cereda, Island of T_EX	2020: A year in review, living on an island
	14:45	Joseph Wright, IATEX Project	Any colo(u)r you like
	15:30	samcarter	News from the TikZ zoo: A short introduction to the TikZlings package
	16:00	Marcel Krüger, IATEX Project & Univ. of Hamburg	Reviving Type 3 fonts for modern LuaIATEX documents
	16:45	Frank Mittelbach, LATEX Project	Interview, conducted by Paulo Ney de Souza
	18:30		TUG Annual General Meeting
	19:30	Keiran Harcombe, Open Univ.; Boris Veytsman, George Mason U.	Creating a VPAT statement for T_{EX} Live
	20:15	Alexei Kolesnikov, Towson Univ.; Al Maneki; Michael Cantino; Rob Beezer, Univ. of Puget Sound; Volker Sorge	Tactile mathematics: Enabling sighted and blind people to share mathematical experience
	21:00	Michael Nolan, Todd Pagano, Suhas Chikkanaravangala Vijayakumar, Rahul Jaiswal, Rochester Inst. of Tech.	Publishing for all: Using LATEX to help improve the accessibility of an open-access journal
	23:00	Ross Moore, Macquarie Univ., Tom Price, Univ. of Akron	Accessible research reports; case study, including acronyms and glossaries
	23:45	Jennifer Claudio, San Jose, CA	Word search puzzles in Arabic, Cyrillic, and English using babel's multilingual support for LATEX

TUG 2021 program (continued)

Sunday August 8

- 00:30 Antoine Bossard, Kanagawa Univ. 01:15 Vafa Khalighi
- 07:00 Mathias Magdowski, Otto von Guericke Univ.
- 07:45 Vic van Dijk, Set your Text
- 08:30 Jonathan Fine, Retired, Open Univ., UK
- 09:15 Ondřej Sojka, Petr Sojka, Masaryk Univ.
- 11:00 Jean-Michel Hufflen, FEMTO-ST & U. Bourgogne Franche-Comté
- 11:45 Nicola Talbot, Dickimaw Books
- 12:30 Heinrich Stamerjohanns, Texmlbus
- 13:15 Michal Hoftich, Charles Univ.
- 15:00 Andy Black, Hugh Paterson, SIL International
- 15:45 Nicolás Vaughan, U. de los Andes
- 17:15 John Hammersley, Overleaf
- $\approx 18:15$ end

TUG 2021 conference report

Arthur Rosendahl and Jennifer Claudio

As with TUG 2020, TUG 2021 was conducted entirely online, due to the continuing global pandemic. The conference spanned a total of four days, of which one had three workshops and the remainder of the days provided the presentation of talks on a 24-hour rotating schedule. This year, there were over 400 attendees from eighteen timezones (approximate map of attendee locations on p. 216). Speakers ranged in age from at least one high school student to long-time users of TFX in industry.

Like last year, the presentations were scheduled during reasonable waking hours for the speakers, wherever in the world they were, and we tried to group them into consistent sessions. A majority of the talks were given by speakers based in Europe, about a third in the Americas, and a few were in the Asia-Pacific region. This presented some challenges, which we tackled the best we could.

Reflecting the growing interest and activity in accessibility, two sessions were dedicated entirely to producing tagged PDF and mathematical documents for the visually impaired. One particularly interesting entry featured testimonies by blind speakers, one of them a long-term LATEX user. Some of the talks showed a lively interest in TEX from developers not primarily focussed on it.

On typesetting an English–Japanese book Bidirectional typesetting in TEX: Past, present, and future

How to generate personalized tasks and sample solutions for anonymous peer review in electrical engineering using LATEX, PGFPlots and CircuiTikZ

R and LATEX: Typesetting graphs in a reproducible way Towards 21st century digital typography

Czechoslovak hyphenation patterns, word lists, and workflow — Why hyphenate Czecho-Slovak simply syllabically?

Programming bibliographies

bib2gls: symbols

Texmlbus, a build system to convert documents to XML and other formats

LATEX to HTML conversion with TEX4ht XLingPaper's use of TEX technologies

TEI-XML to LATEX workflow: Issues and lessons Interview, conducted by Paulo Ney de Souza

XML was the topic of two half-sessions (originally a single one that suffered from some time zone changes). Here again, we were treated to a healthy and enjoyable mix of talks by speakers from both within and outside our community, who all used TEX-based processes for typesetting XML documents, sometimes as part of a larger workflow.

Workflows of different kinds and scopes were featured in a number of talks, with applications ranging from version control integration, via automated production of student assignments, to large-scale document processing for scientific publishing.

We had several talks about multilingual typesetting, unsurprisingly given the international make-up, and two talks about bibliographies.

A TEX conference wouldn't be complete without some talks about fonts, and although there were somewhat fewer of them this year, they were not missing: there was one talk about variable fonts, a second about applications to air travel, and a workshop about making a logo.

To help encourage the function of the conference as a means of idea exchange, the communication and media platforms of Zulip and Topia were offered.

Videos of individual talks will be posted on the TUG YouTube channel when they are available: youtube.com/c/texusersgroup.

> Arthur Rosendahl and Jennifer Claudio https://tug.org/tug2021