HEPiX Spring 2025 Workshop



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Enabling Accessibility to CERN audiovisual content via Automated Speech Recognition

Friday 4 April 2025 11:45 (15 minutes)

A key stepping stone in promoting diversity and accessibility at CERN consists in providing users with subtitles for all CERN-produced multimedia content. Subtitles not only enhance accessibility for individuals with impairments and non-native speakers but also make what would otherwise be opaque content fully searchable. The "Transcription and Translation as a Service" (TTaaS) project [1] addresses this need by offering a high-performance, privacy-preserving, and cost-efficient Automated Speech Recognition (ASR) and translation system for both existing and newly created audiovisual materials, including videos and webcasts.

The TTaaS solution is powered by state-of-the-art technology developed by the MLLP group [2] at the Universitat Politècnica de València. Over the past two years, the service has processed more than 30,000 hours of CERN media, delivering accurate transcripts and translations to ensure accessibility for a global audience. The system has also been tested for live ASR during several CERN/HEP conferences and events.

This presentation will provide an in-depth look at the TTaaS solution, including its core technologies, operational workflows, integration with CERN IT services, and its significant role in making CERN's multimedia content accessible to all.

- [1] https://ttaas.docs.cern.ch/
- [2] https://www.mllp.upv.es/

Desired slot length

Speaker release

Yes

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