

Enhancing Developer Experience in Near Real-Time Scientific Data Processing: The AsapoWorker Library

High-throughput scientific experiments generate massive data streams requiring near real-time processing for time-critical decision making. However, developing robust streaming workflows presents significant challenges in distributed computing environments.

We present AsapoWorker [1](#), a Python library that simplifies the development of processing workers on top of the Asapo [2](#) streaming framework. AsapoWorker enhances developer experience by providing automated error handling, seamless stream switching, and simplified interfaces that abstract streaming complexity.

This poster introduces AsapoWorker's core concepts and demonstrates its capabilities for scientific streaming applications. We aim to initiate a conversation with the broader developer community from research centers to discuss how the library can be improved to achieve higher adoption rates, lower introduction barriers, and facilitate easier integration of new features following established software development principles. In turn, enabling more efficient experimental workflows and accelerating scientific discovery.

I want to give a Lightning Talk

no

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