

# DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects



Contribution ID: 22

Type: **Parallel talk**

## Simultaneous Global Analysis of Di-Hadron Fragmentation Functions and Transversity PDFs

*Thursday, 30 March 2023 14:20 (20 minutes)*

We perform the first simultaneous extraction of di-hadron fragmentation functions (DiFFs) and transversity PDFs using data from single-inclusive annihilation (SIA) in electron-positron collisions, semi-inclusive DIS, and proton-proton collisions. In particular, we include new SIA data from Belle that provides, for the first time, experimental constraints on the unpolarized DiFFs, as well as proton-proton data from STAR at center of mass energy 500 GeV. We present results for the transversity PDFs and tensor charge and explore the impact of theoretical constraints such as the Soffer bound.

### Submitted on behalf of a Collaboration?

No

### Participate in poster competition?

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**Session Classification:** WG5

**Track Classification:** WG5: Spin and 3D Structure