

Stardust Meeting

September 11th 2022

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Imperial Tasks

- **Multiparty Session Types**
- **Scribble language (nuScr)**
- **Static Actor Languages (Scala, Rust, Go)**
- **Microservices**

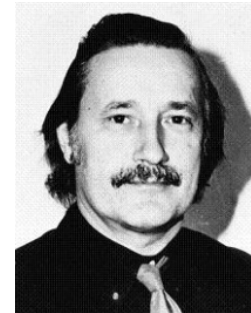


microservice



Idioms for Interaction

from Conventional to Concurrent/Distributed Programming



1916-1975

- **Christopher Strachey** (sequential computation)
 - ▶ **Types** = abstract computation (data types, polymorphism)
 - ▶ **Structured programming** = High-level programming
- **Session types** (concurrency & communication)
 - ▶ Structured programming = **protocols**

Today's Talks

Generalised Multiparty Session Types with Crash-Stop Failures

Fangyi Zhou and Ping Hou (**CONCUR'22** with Adam D. Barwell, Alceste Scalas, and NY)



Stay Safe under Panic: Affine Rust Programming with Multiparty Session Types, Nicolas Lagaillardie (**ECOOP'22** with Romyana Neykova and NY) and Ping Hou (Rolan Kuhn)



Cf. ***Deadlock-Free Asynchronous Message Reordering in Rust with Multiparty Session Types*** (**PPoPP'22**, Zak Cutner, NY and Martin Vassor) (Rolan Kuhn)



Today's Big Aim

Welcome -- Duncan Attard

Cf. discussion among Duncan, Adrian, Fangyi, NY

