

# SRCNet v0.1 Expression of Interest

**Séverin Gaudet, SRC Canada lead**



# SRC Canada

## Basis of Canada's SRC Funding

- **Funded through NRC/Herzberg Astronomy and Astrophysics Research Centre (HAA)**
- **Scaling up of existing CADC/CANFAR infrastructure**

## Organization

- **The CADC is the development and operations centre**
- **The Digital Research Alliance of Canada (DRAC) is providing storage, processing, and networking services and operations staff.**
- **CANARIE (NREN) is providing the international and cross-country networking**
- **The HAA to host a user support team**
- **A university-based PDF program**



# CADC/CANFAR Services

- Operationally in use by a large astronomical community
- SRCNet AAI integration
- Deployable in kubernetes
- ❖ Deployed and deployable at other SRCs with support from Red team
- Interoperable between SRCs
- IVOA APIs for access and monitoring
- Public radio collections available for dissemination and testing
- ❖ CANFAR science platform (2000 cores)
- ❖ Harbor image registry
- ❖ Cavern user storage (4 PB)
- ❖ Storage Inventory data services (10 PB; 800M files; 6 sites)
- ❖ Storage Inventory data dissemination tools
- ❖ CAOM metadata services (41M obs.)
- ❖ CAOM metadata dissemination tools
- User databases (30 TB)
- ❖ Currently deployed at other SRC sites



# For SRCNet v0.1

- Already running most required services
- SRCNet-science-user ready
- Storage/processing procurements underway
- Fully staffed operations team (CADC/DRAC)
- Supporting pre-cursor science projects: CHIME, WALLABY, POSSUM, VLASS, MWA, MeerKAT
- Scaling up infrastructure and acquiring experience with workflows
- Will make capacity available to v0.1 commensurate with need\* and shared with pre-cursor activities\*
- Allocations will be to groups and users via the SRCNet AAI

## Planned Capacity for can|SRC Activities

	End of 2024	End of 2025
PBytes	Up to 4*	Up to 5*
Scratch	✓	✓
Cores	Up to 700*	Up to 2500*
RAM	✓	✓
LAN	✓	✓
WAN	✓	✓
Ops	✓	✓

