# HackHPC@ADMI Virtual Hackathon March 31st - April 4th

# **NFT4Data:**

## Citizen Science and IoT Weather Data

### **PROBLEM SETUP:**

- A. Citizen science participation is necessary for climate data collection
- B. As more data is submitted, validating the quality and integrity (veracity) of the data is of utmost importance
- C. Data is **increasingly** being drawn from citizen science operated IoT devices
- D. The volume of such data is often large and the quality and integrity are also critical
- E. We need better solutions to verify the data coming from humans and machines so that it can be confidently used by **others** in the community

# **Could NFT4Data be a solution?**

- NFTs are unique digital identifiers
- They cannot be copied, substituted or subdivided
- They are recorded on the blockchain and supposed to support authenticity and ownership of a digital asset (bits, data) ...

#### Why not use them for data?

#### THIS PROJECT WILL EXPLORE:

- How NFT might be used for digital data authenticity for weather data,
- How to prove authenticity of transmitted weather data (whether from machine or human),
- What Technical Requirements are necessary to bring this to fruition (including existing attempts to do this),
- What ethical and practical dimensions of data "ownership" in an "open data" world need to be considered

