

# Testing serialization is hard

- If you use a registry for deduplication, don't forget to have a test where you clear the registry!
- Class-based grouping of tests are useful here, with a mix-in for serialization testing
- Beware of things that are conceptually equal but don't test that way: NaN!

# A serialization solution

- There is a `to_dict` / `from_dict` method for each class that creates a shallow mapping of attributes.
- All classes that can be serialized this way inherit from a base class and carry a mechanism for creating their unique identifier.
  - OPS: UUID; OpenFE: gufe key
  - Do you want equivalent objects created at different times to have the same identifier, or different ones?
- There is a function that consumes such objects and converts them to bytes/string.