❶ this lecture has to
be continued from
31:26 please

channel: Pore Lab
Topological characterization of fluid
    microstructure via
        Persistent Homology
            by Dr Anna Herring

Microwave Remote Sensing

Lec 1

History.
    She discussed terminologies.

Course sections that seem
useful for Dharti 1.0

1) correspondance of wavelength
    to cloud pentration. (Module 1)

2) Image pixels are 2D and
    use complex numbers.
    To add a temporal dimension
    maybe we can look into
    3D algebraic number systems.
        Q / [2³ + i]   maybe (Module 2)

3) Relation between image
    defects and stochastic
    denoising in diffusion models
    (Module 2)

4) Module 3: Liter
    supervised & uns

5) Module 5: can
    After we consid

6) Module 6:
    Radar interfero
    a distance m
    two waves

7) Tutorial 3
    we need SN

8) Tutorial 4
    ↳ There will b
    Theres man
    can do wi
        → Kahln
        → Literal
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        → Persist
            timese

9) Tutorial 5
    ↳ Denoisiy

10) Tutorial 6 is
    we directly
    or unsupe

11) Tutorial 7 se
    direct exten

4) <u>Module 3</u>: literally talks about supervised & unsupervised classification

5) <u>Module 5</u>: can be useful AFTER After we consider active sensing

6) <u>Module 6</u>:
   - Radar interferometry =
     - distance metric between two waves.

7) Tutorial 3
   we need SNAP

8) Tutorial 4
   ↳ There will be time series data
   Theres many things we can do with time series data
   → Kahlman filter
   → Literally any kind of analysis used in finance
   → Persistent homology for timeseries.

9) Tutorial 5
   ↳ Denoising

10) Tutorial 6 is most important we directly have supervised vs unsupervised methods.

11) Tutorial 7 seems to be a very direct extension of Tutorial 6

12) Tutorial
    Tutorial
    sense th
    analysis

13) Tutorial
    importan
    of Radar

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Anna Herring

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(Module 1)

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12) Tutorial 9 is related to
Tutorial 4 in the
sense that it focuses on
analysis.

13) Tutorial 11 is very
important as an application
of Radar interferometry.