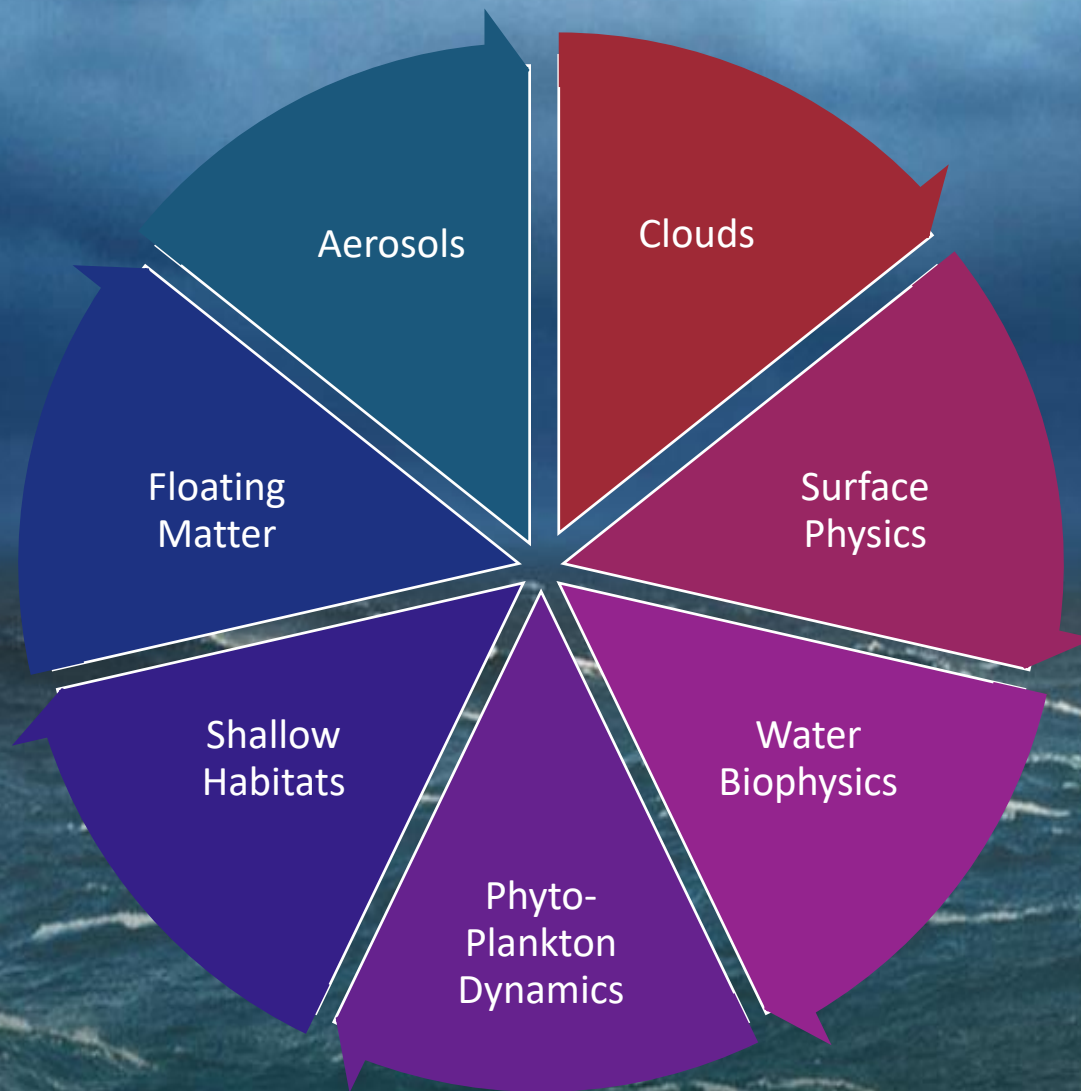


PACE SCIENCE TEAM BY TOPIC

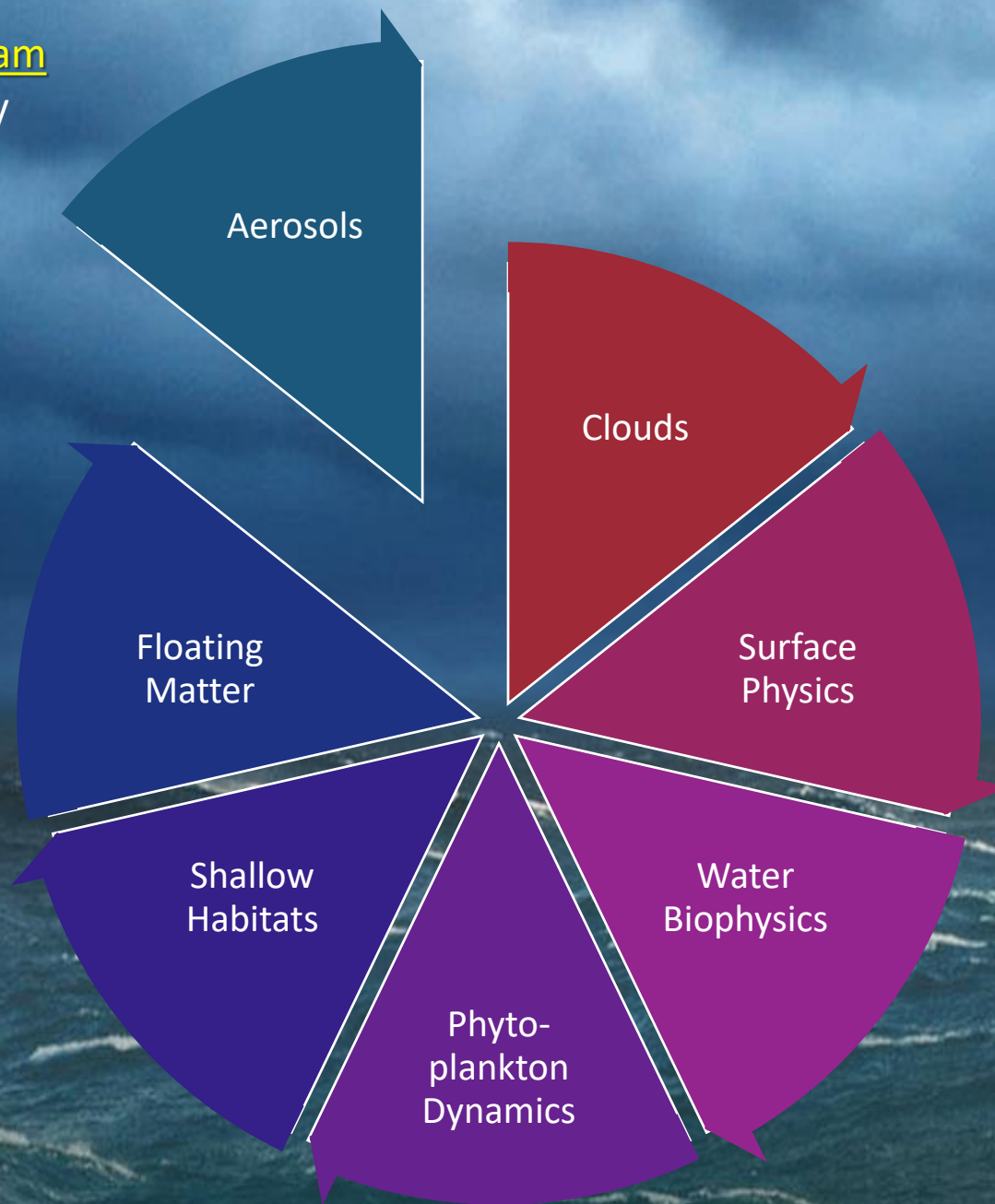


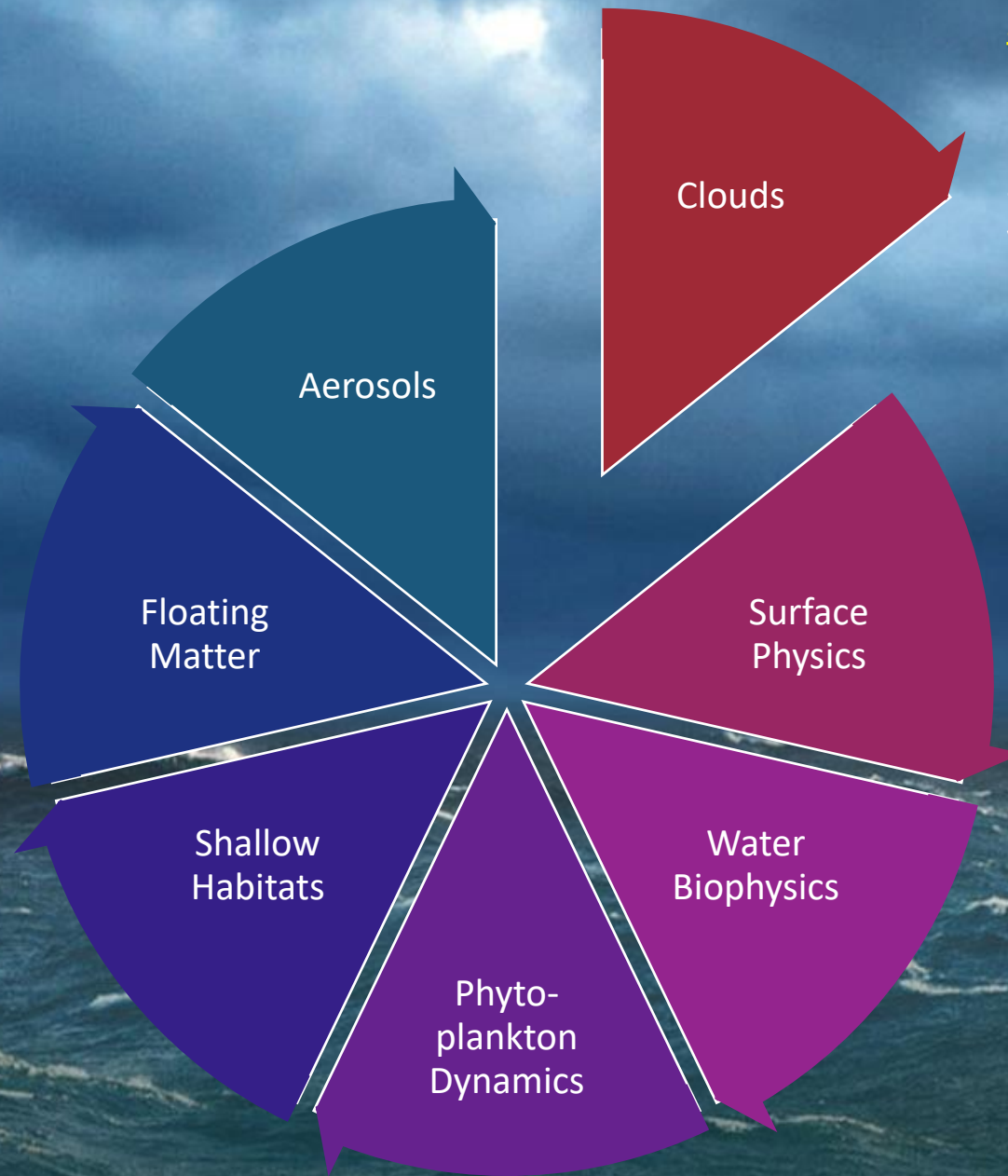
Science Team

Chowdhary
Lyapustin
Ottaviani
Remer
Stamnes
Zhai

Properties

- Spectral Optical Depth (water and land)
 - Fine mode
 - Sea Salt
 - Dust
- Spectral Absorption
- Black Carbon Concentration
- Brown Carbon Concentration
- Aerosol Height
- Aerosol Size Parameter
- Aerosol Effective Radius
- Column Water Vapor (land)



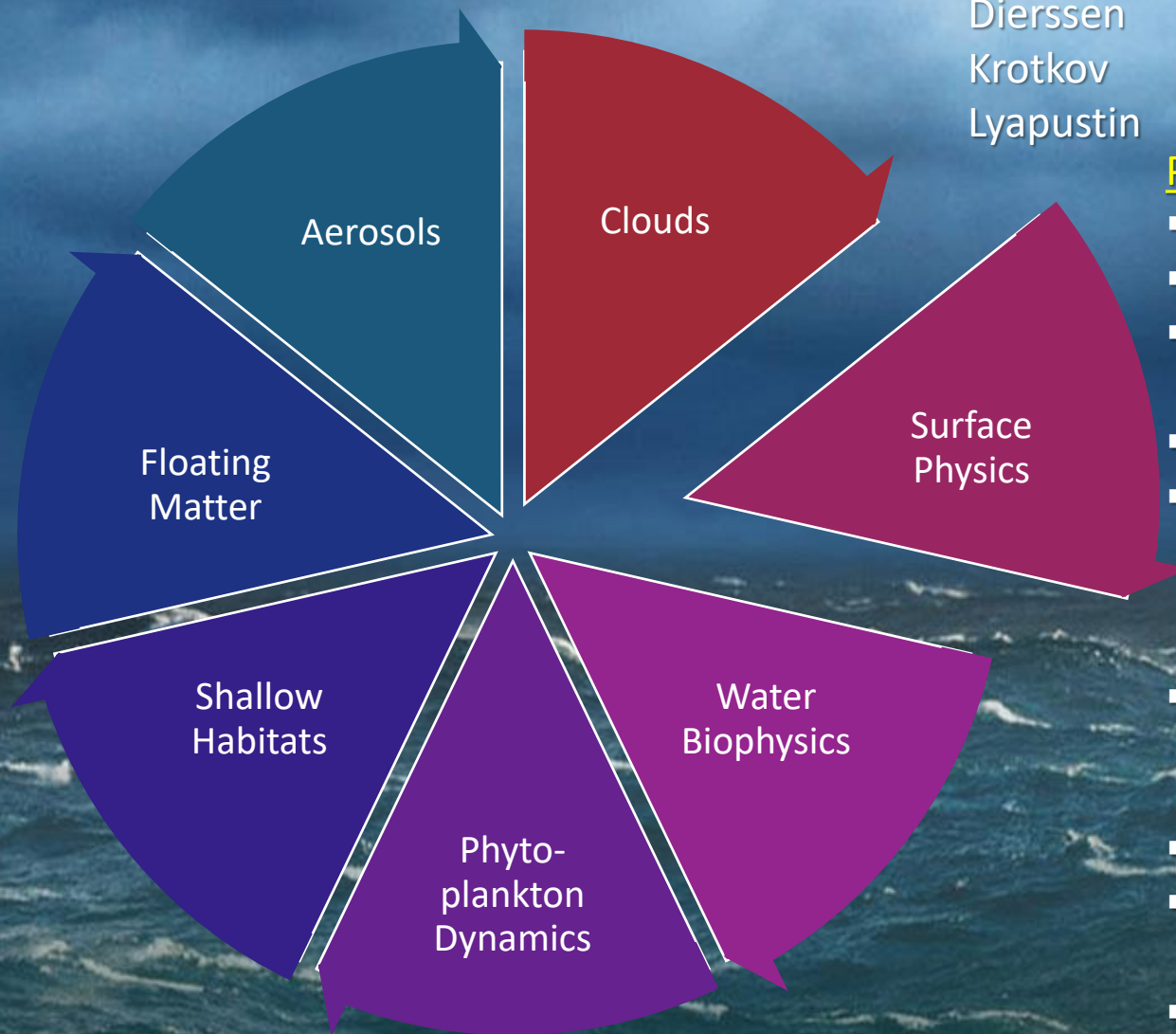


Science Team

Lyapustin
Meyer
Stamnes
van Dierenhoven

Properties

- Opaque Cloud Detection
- Thin Cirrus Cloud Detection
- Cloud Fraction
- Cloud Top Pressure
- Cloud Top Altitude
- Cloud Top Thermodynamic Phase
- Optical thickness
- Physical thickness
- Particle Effective Size
- Cloud Droplet Size Distribution
- Ice Crystal Shape
- Ice Crystal Scattering

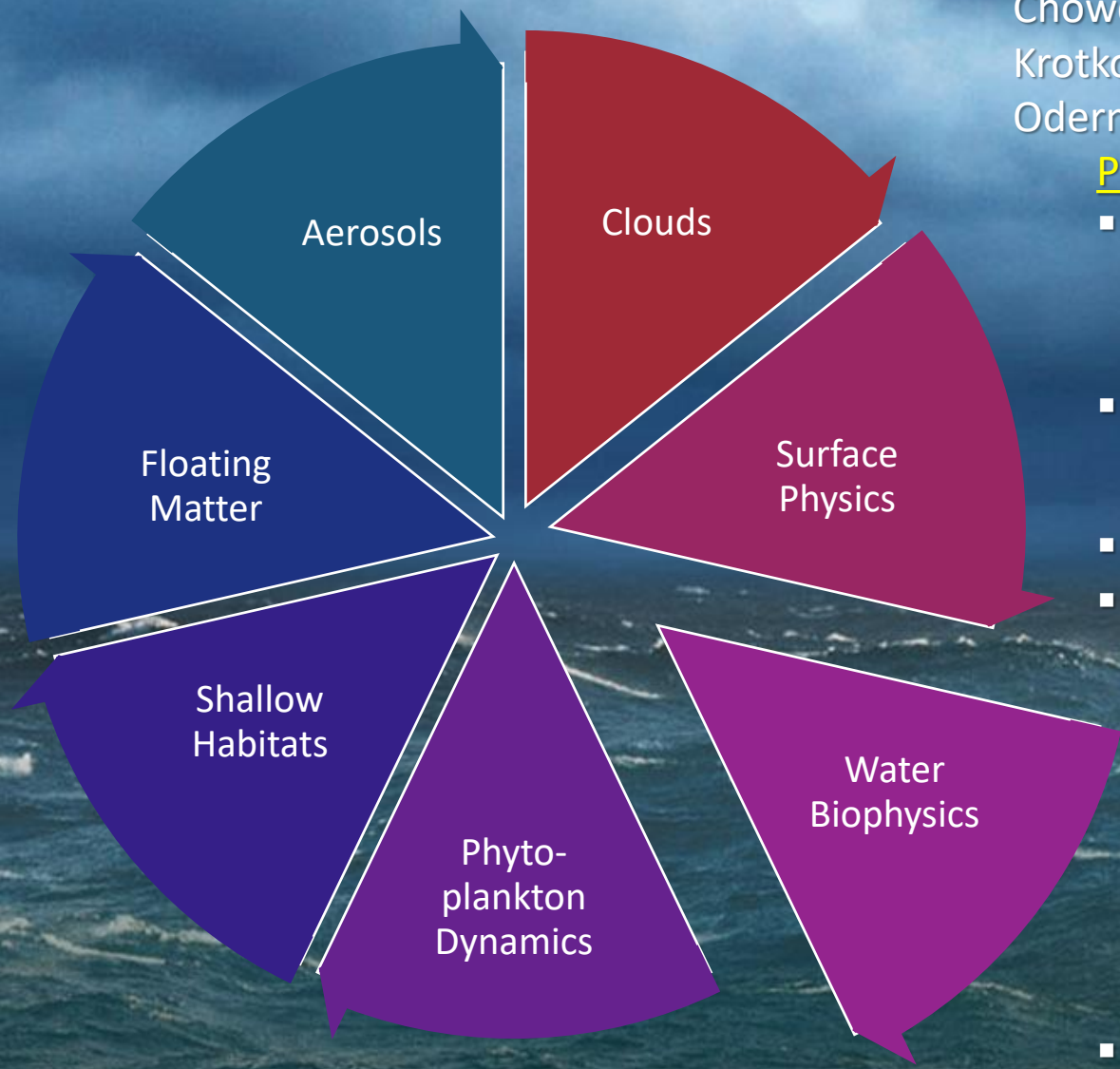


Science Team

Boss	Ottaviani
Chowdhary	Twardowski
Dierssen	Zhai
Krotkov	Zhang
Lyapustin	

Properties

- Ocean Albedo $R(\lambda)$
- Land Albedo $R(\lambda)$
- Spectral Water-leaving Reflectance $R_w(\lambda)$
- Polarization Parameters
- Irradiance at Interface
 - Photosynthetically Available Radiation $E_d(0^+, PAR)$
 - Downwelling Irradiance $E_d(0^+, \lambda)$
- Irradiance Below Water Surface
 - Downwelling Irradiance $E_d(0^-, \lambda)$
 - Scalar Irradiance $E_o(0^-, \lambda)$
- Surface Index of Refraction
- Bidirectional Reflectance Function (BRDF)
- Whitecap Fraction/Factor



Science Team

Barnes

Boss

Chowdhary

Krotkov

Odermatt

Pahlevan

Shuchman

Stamnes

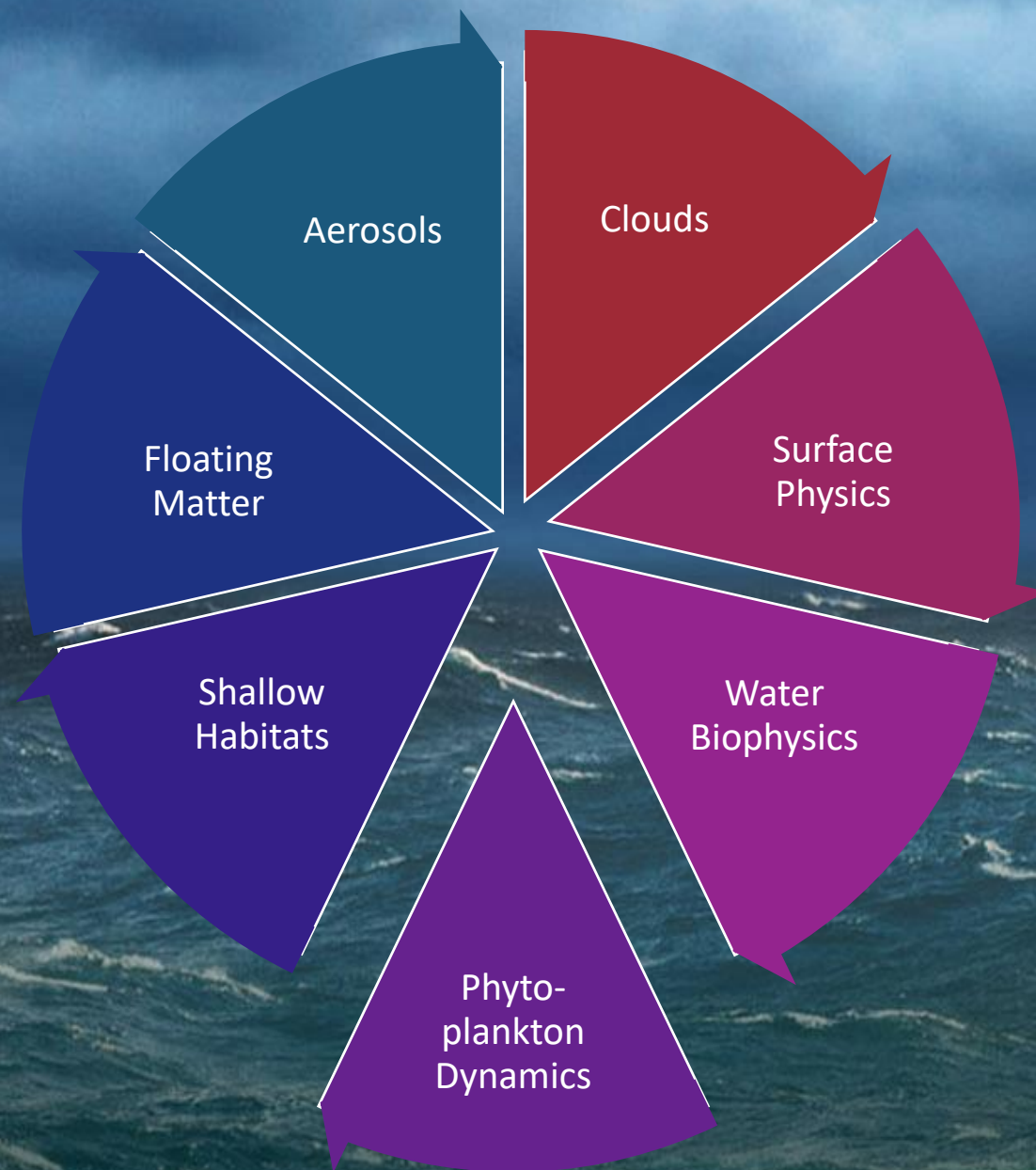
Stramski

Twardowski

Zhai

Properties

- Spectral Light Penetration
 - Downwelling Attenuation $K_d(\lambda)$, $K_d(\text{PAR})$
 - Scalar Attenuation $K_o(\lambda)$
- Turbidity
 - Suspended Particulate Matter (SPM)
 - Nephelometric Turbidity Unit (NTU)
- Vertical Stratification Properties
- Spectral Inherent Optical Properties (Deep and Shallow)
 - Absorption by Gelbstoff
 - Absorption by Phytoplankton
 - Absorption by Non-pigmented Particles
 - Volume Scattering Function
 - Backscattering
 - Particulate and Bubble Backscattering
 - Backscattering Ratio
- Shallow Bathymetry

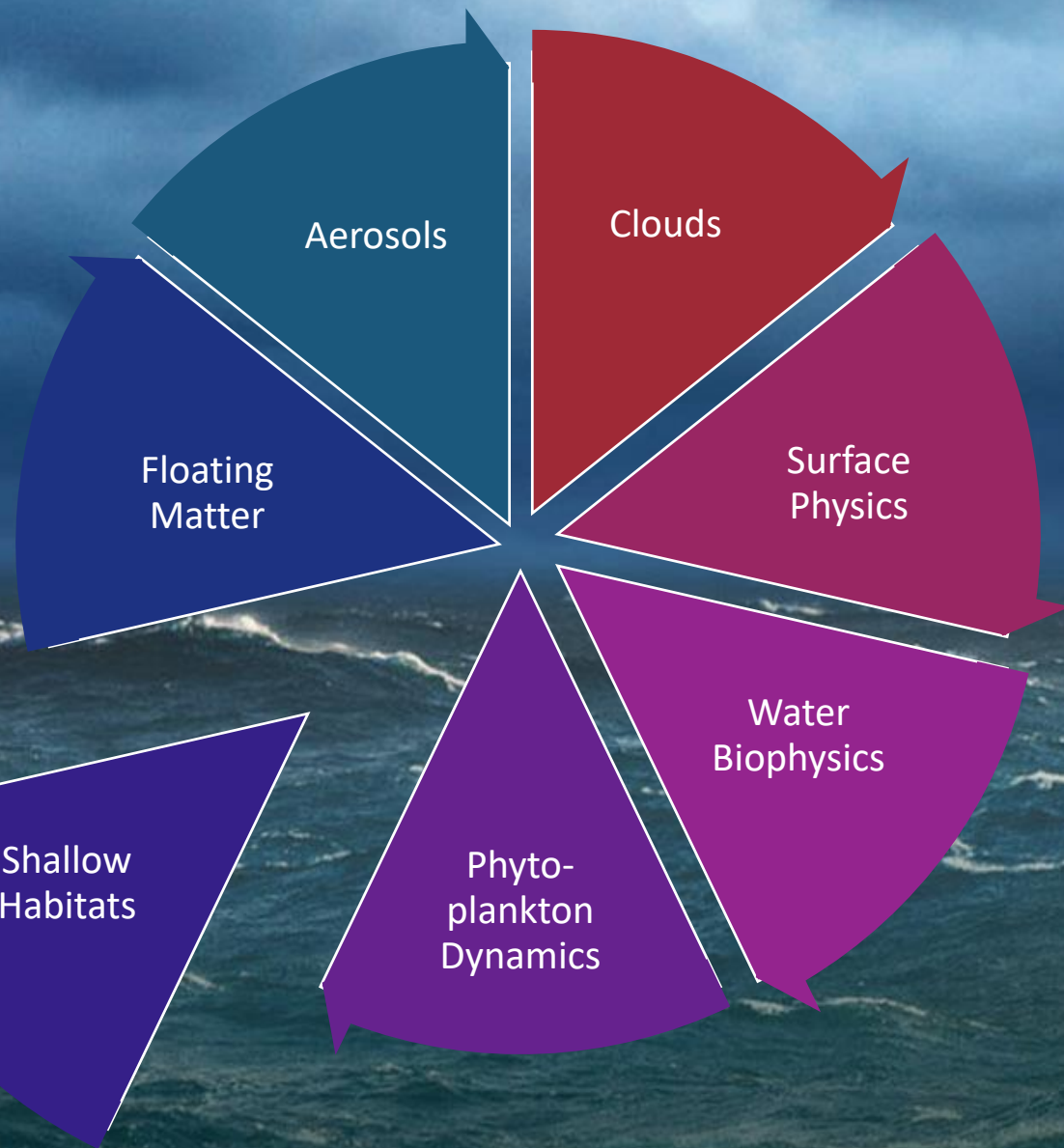


Science Team

Gaube
Pahlevan
Rousseaux
Shuchman
Siegel
Westberry

Properties

- Phytoplankton Pigment Concentration/Marker
 - Chlorophyll-a
 - Phycocyanin
 - Etc..
- Phytoplankton Composition
- Net Primary Productivity
- Fluorescence Line Height
- Adaptive Maximum Chlorophyll Index



Science Team

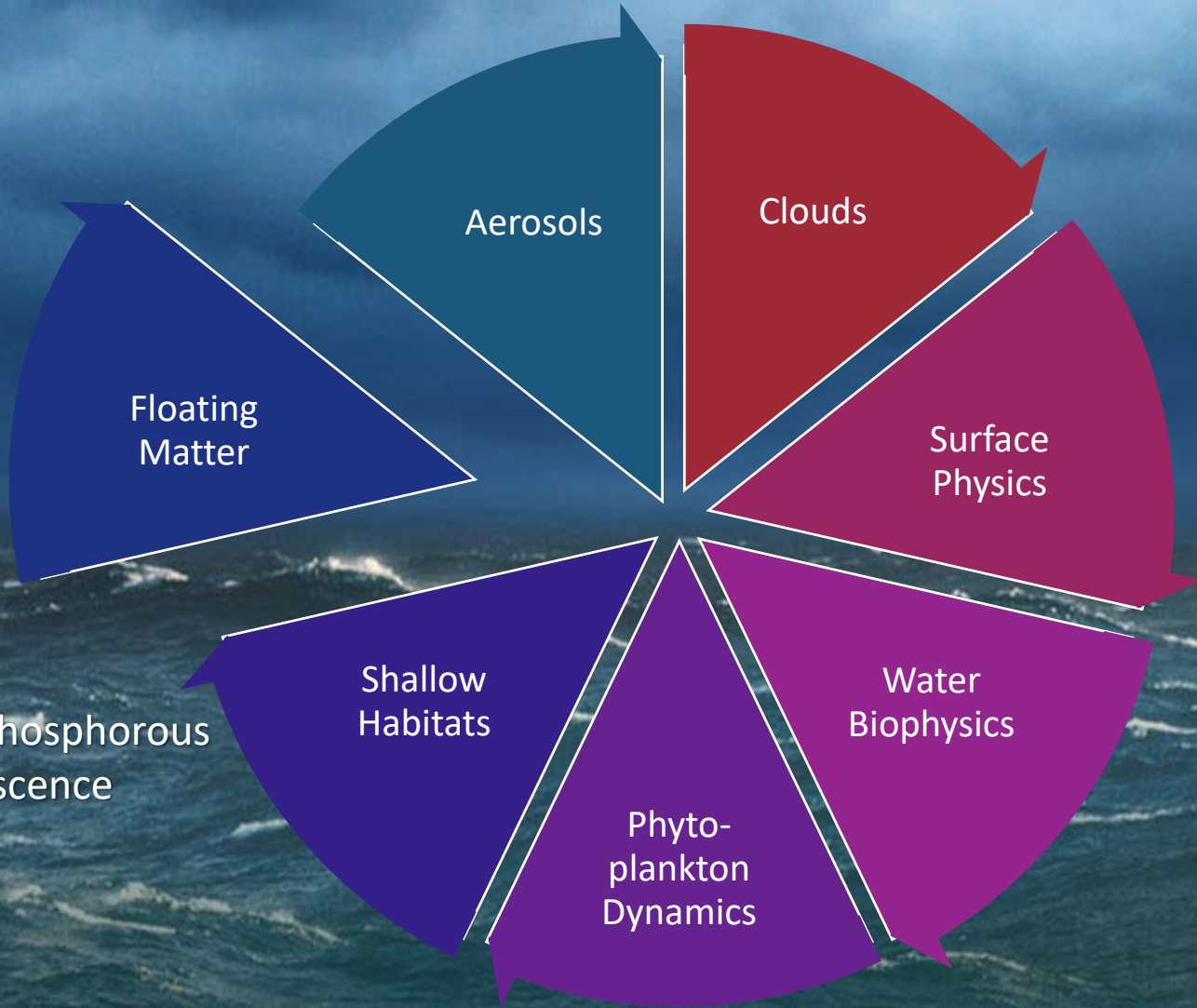
Barnes

Properties

- Benthic Classification
 - Coral
 - Seagrass
 - Shallow Algae
 - Sediment
- Benthic Condition
 - Change over time

Science Team

Hu
Ottaviani
Shuchman



Properties

- Sargassum Dynamics
 - Density
 - Depth
 - Carbon, nitrogen, phosphorous
 - Sun-induced fluorescence
- Oil Detection
- Surface Scum Index