Title: Development of Robust Spectral Derivative Algorithms for Phytoplankton Pigment Concentrations on Local to Global Scales

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Goal: Develop spectral methods for quantifying marker phytoplankton pigments

Approach:
• Explore “spectral gap” between phytoplankton IOPs & other IOP signals
• Remove low-order info from hyperspectral Rrs in order to assess high-pass (hopefully phytoplankton) reflectance signals
• Account for covariability among pigments & their spectral signatures
• Focus on both local (PnB; Santa Barbara Channel, CA) & global scale models

Deliverables:
• Highly-curated global & local hyperspectral data for PACE model development
• Robust & documented algorithms for phyto marker pigments for PACE