Europa science and future exploration

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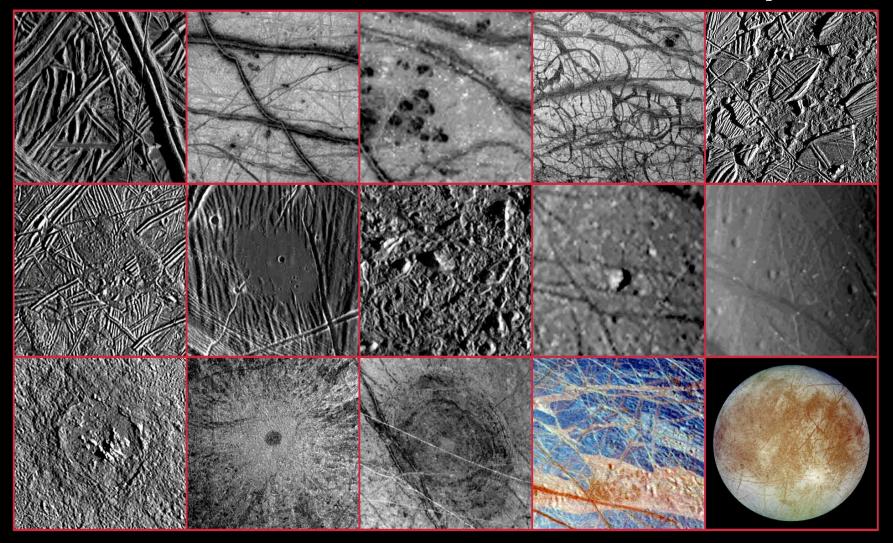
Current Author List

- Cynthia Phillips (SETI Institute)
- John Cooper (GSFC)
- Brad Dalton (JPL)
- Kevin Hand (JPL)
- Rachel Mastrapa (ARC / SETI Institute)
- Bob Pappalardo (JPL)
- Others welcome: email phillips@seti.org or see me at this meeting





EUROPA — Surface-feature examples







Need to sell the science

- EJSM competitively selected through the OPF process
- Highly scientific relevant
- But given budgetary realities we heard about this morning, not a done deal
- There will also be an EJSM white paper this one will be science-oriented (EJSM white paper = mission-oriented)





White paper overview

- Last white paper: 2002 white paper (Cooper et al): 36 pages!
- That helped inform future mission studies, two-spacecraft design heritage seen in current EJSM / ESA Ganymede mission
- This white paper can only be 7 pages
- Must make points succinctly, also include Europa objectives in OPAG white paper, astrobiology white papers, etc.





Outline

- Abstract / summary (1 page)
- Overview of Europa science (2.5 pages)
 - Focus on unanswered questions
 - Relevance to NASA's goals and astrobiology
- EJSM: science goals (2.5 pages)
 - Instruments / measurements, how they will answer these unanswered questions
 - Focus on how the process represents the consensus of the scientific community
- Other future mission concepts (1 page)
 Lander (Russia?), magnetospheric instrument /

mission (Japan?), others



