

Origin and Evolution of the Moon's Dynamo

1. Introduction

- Historical perspective (Mike Fuller, Lon Hood)

2. Paleomagnetism (Sonia Tikoo, Jerome Gattacceca, Ben Weiss)

- magnetic carriers and lunar rock magnetic properties
- Acquisition of magnetization: TRM, SRM
- paleomagnetic field strength

3. Crustal Magnetism (Lon Hood, Mike Purucker, Jasper Halekas, Rona Oran, Mark Wieczorek)

- surface measurements
- magnetic field from orbital measurements (magnetometer and electron reflectometer)
- magnetic signatures of impact basins (including antipodes, SPA)
- properties of crustal magnetic anomalies (depth, size, strength, direction)
- magnetic paleopoles

4. Dynamo generation (Krista Soderlund, Francis Nimmo, Doris Breuer)

- thermal dynamos
- core crystallization
- precession
- inertial instabilities

5. Synthesis (Mark Wieczorek, Ben Weiss, Sonia Tikoo)

- discrepancy of paleofield strengths and dynamo modeling
- dynamo strength as a function of time: discrepancies between paleomag and crustal fields
- source of power for dynamo generation

6. Conclusions and future work (Ben Weiss and Mark Wieczorek)