

The MIT logo, consisting of the letters 'MIT' in a stylized, blocky font. The 'M' is formed by three vertical bars of varying heights, and the 'I' and 'T' are solid vertical bars with horizontal caps.The Senseable City Lab logo, featuring the letters 'SCL' in a stylized, blocky font. The 'S' is formed by two vertical bars of varying heights, and the 'C' and 'L' are solid vertical bars with horizontal caps.

senseable
city lab.

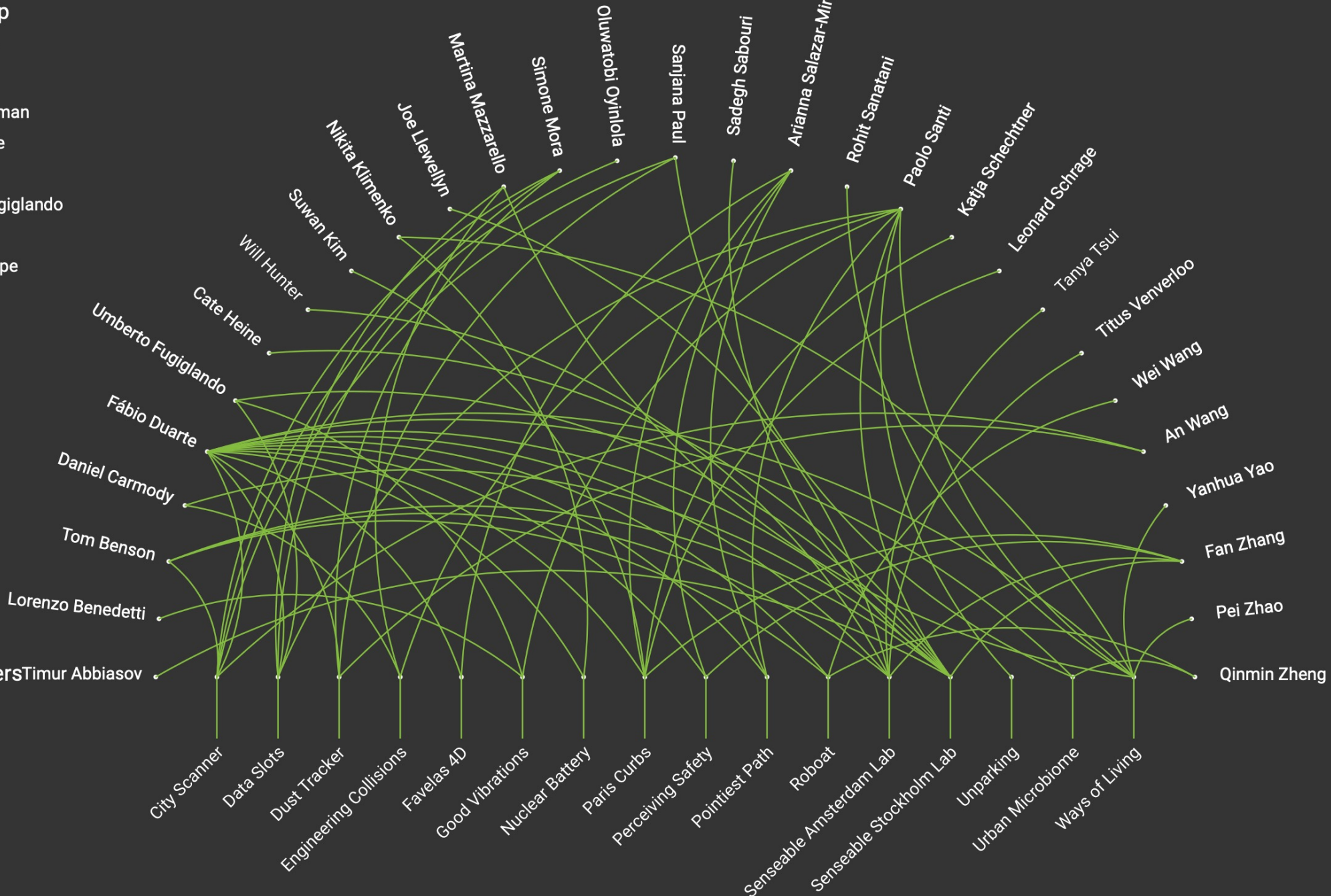


MCMXVI

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Leadership

- Carlo Ratti
- Assaf Biderman
- Fábio Duarte
- Paolo Santi
- Umberto Fugiglando
- Rose Silva
- Paulina Sterpe

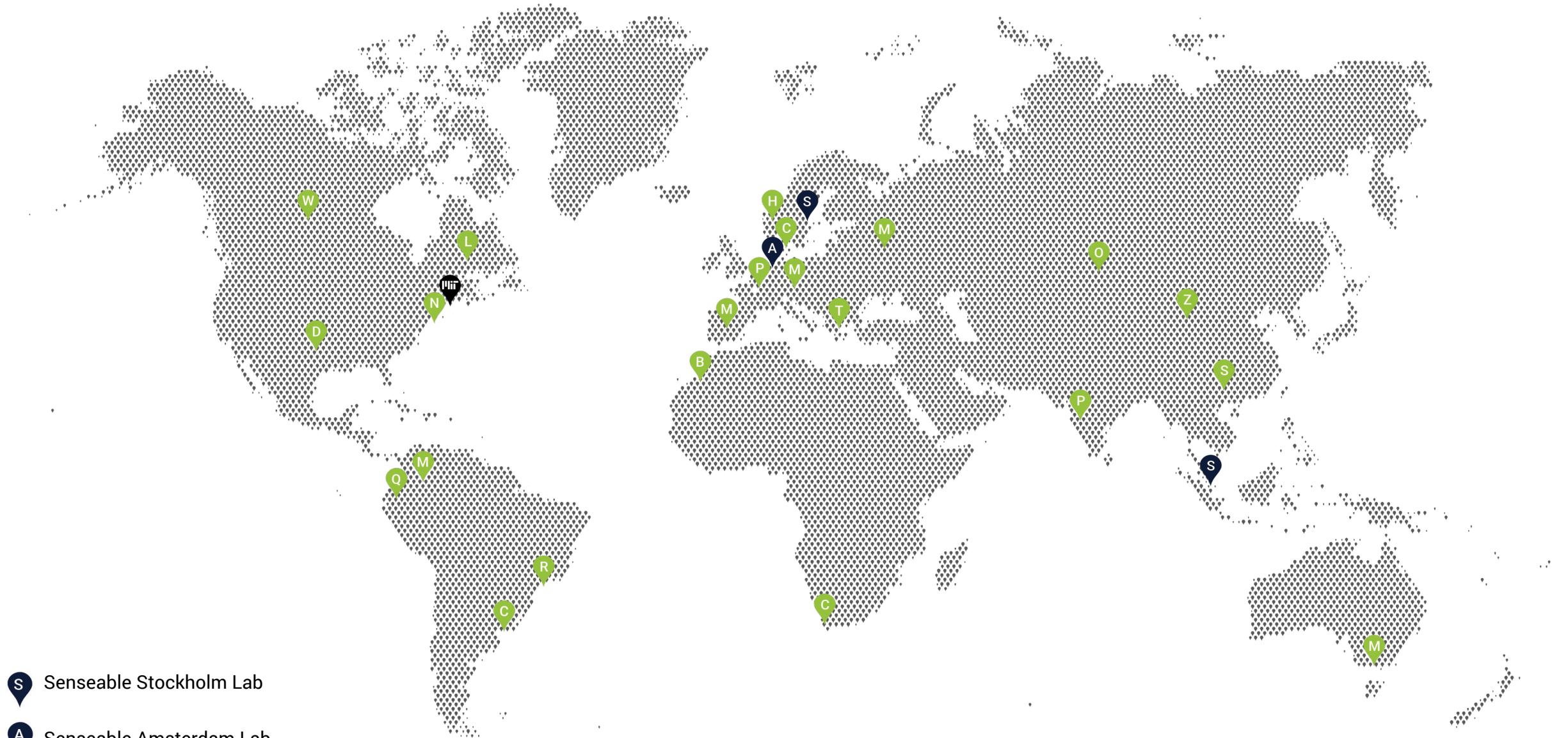





Researchers

Projects



3 55 70 75



-  Senseable Stockholm Lab
-  Senseable Amsterdam Lab
-  MIT-SCL Smart Singapore

SCL PROJECTS



DATA, TECHNOLOGY, CITIES

nature

THE INTERNATIONAL WEEKLY JOURNAL OF SCIENCE



Network analysis
of journeys reveals
optimum size for New
York taxi fleet **PAGE 534**

DRIVING FORCE

CLINICAL ONCOLOGY

MICROBIOME MATTERS

*Harnessing gut bacteria
to aid cancer therapies*

PAGE 482

CLIMATE CHANGE

ECONOMICS OF EMISSION CUTS

*UN goal of 1.5 °C warming
offers potential savings*

PAGES 498 & 549

EVOLUTION

HEAD START FOR HUMANS

*How ecological factors
increased human brain size*

PAGES 496 & 554

NATURE.COM/NATURE

24 May 2018 £10

Vol. 557, No. 7706



Minimum Fleet



P

AMS Mii

City of Amsterdam

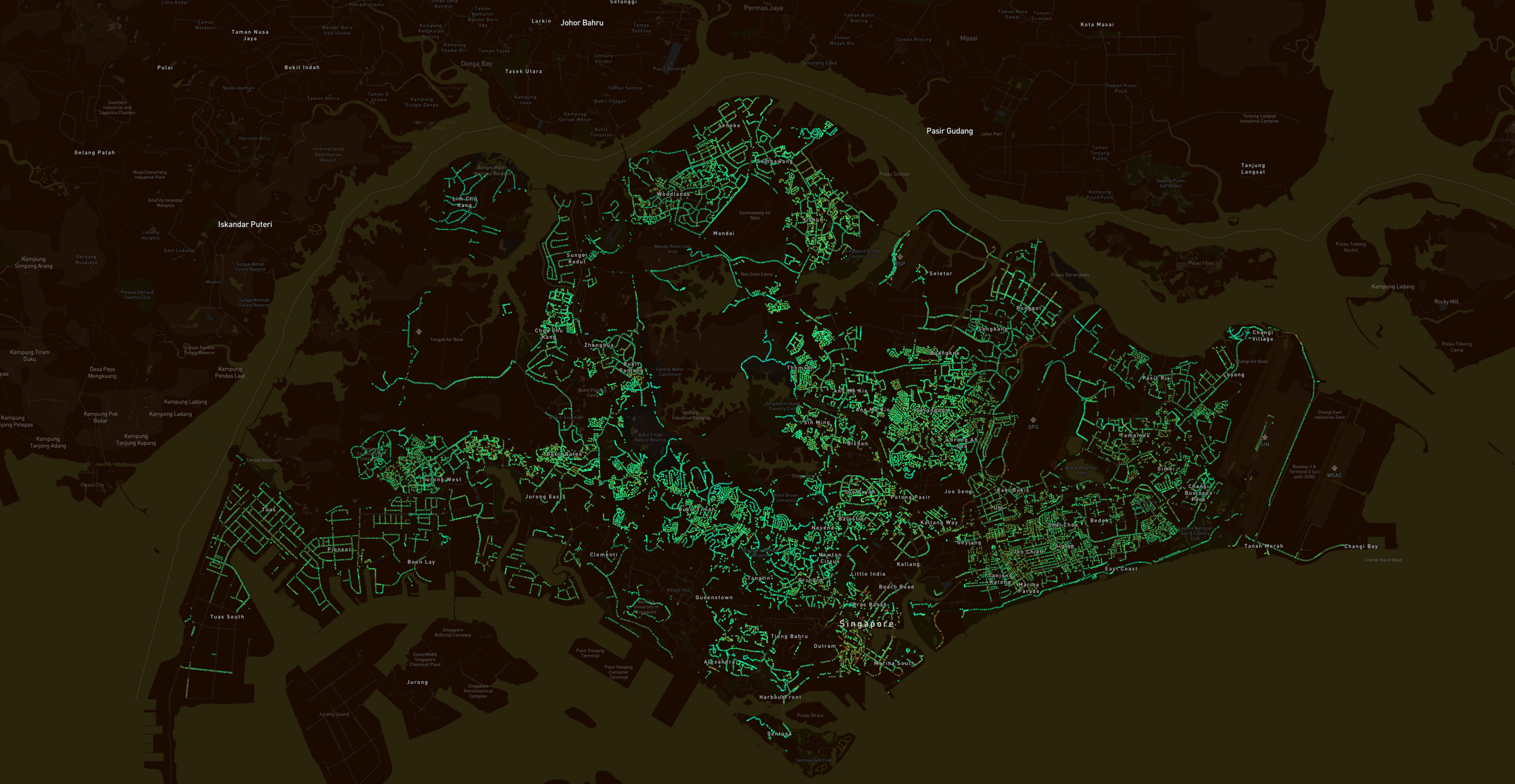
manRoto

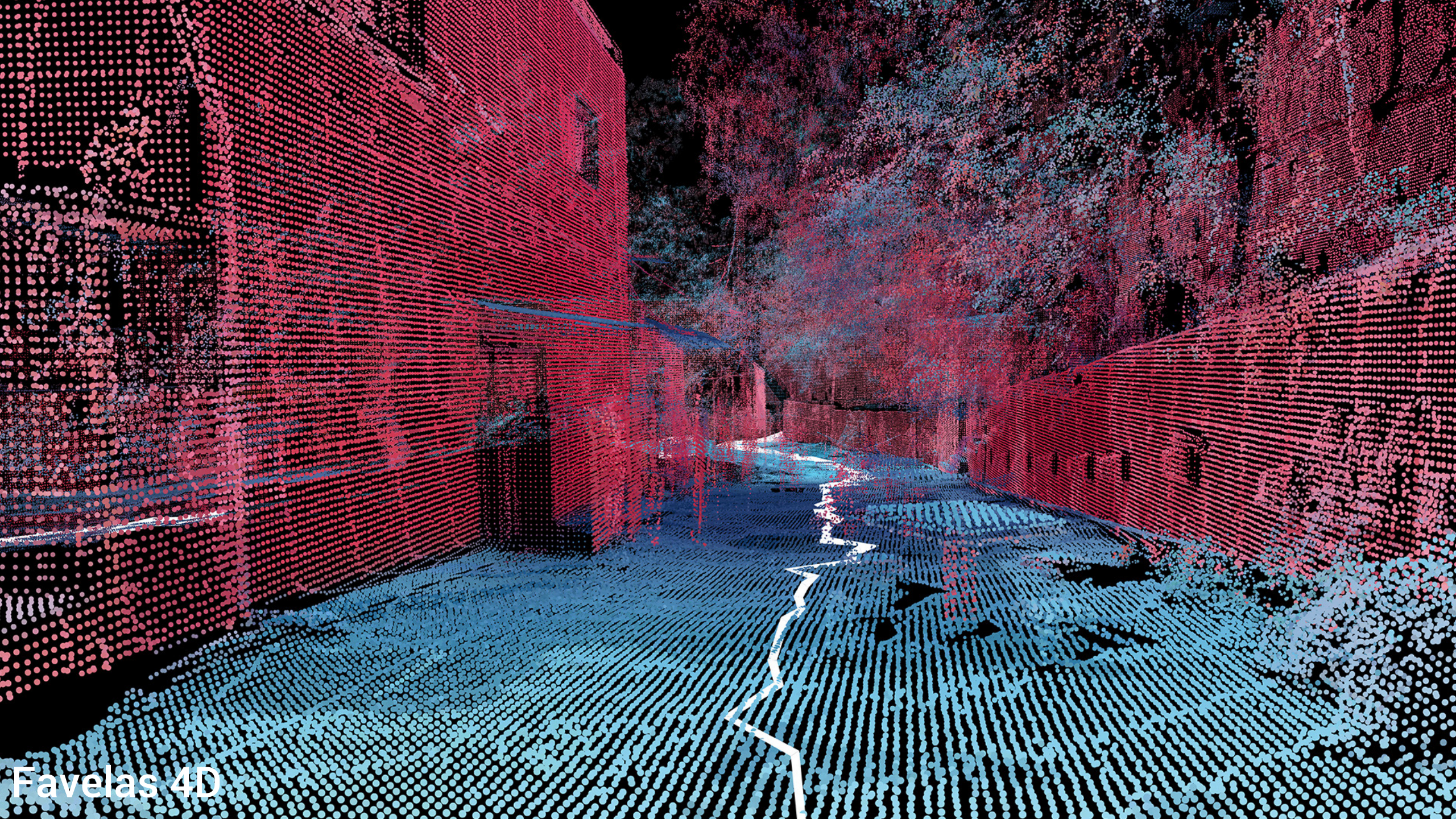
roboat.org

LUCY 1

roboat.org

Roboat





Favelas 4D

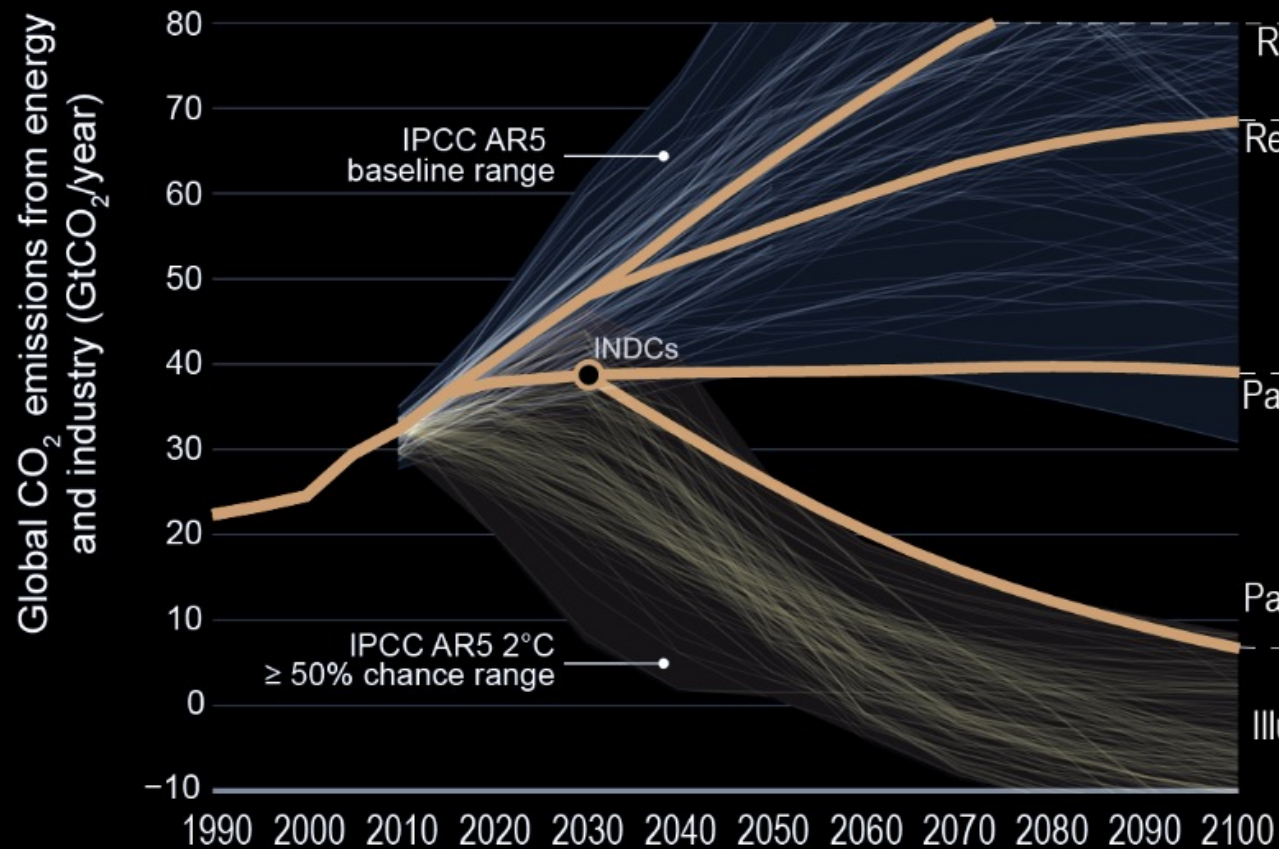
Space Bubbles



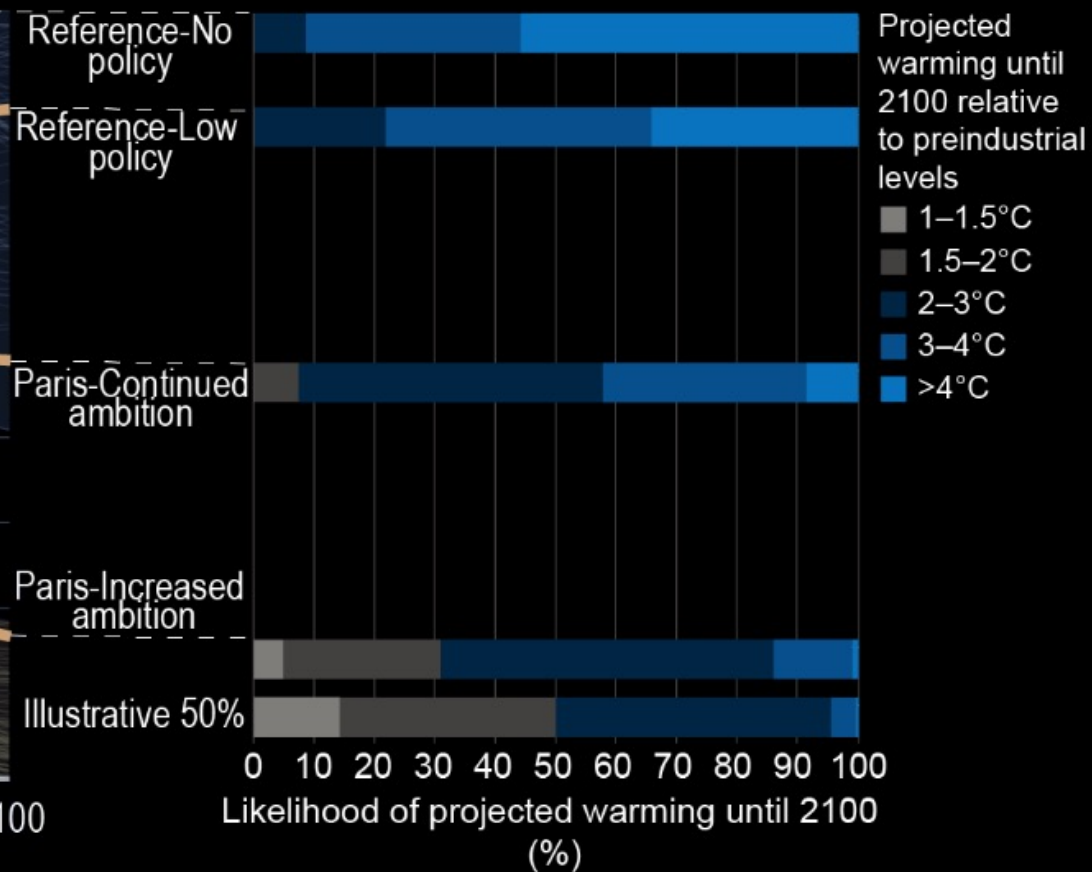
GEOENGINEERING, CLIMATE

If climate change has already gone too far,
what could be our emergency solutions?

(a) Emissions pathways



(b) Temperature probabilities



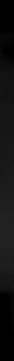
Most **geoengineering** proposals are earth-bound, which poses tremendous risks to our living ecosystem

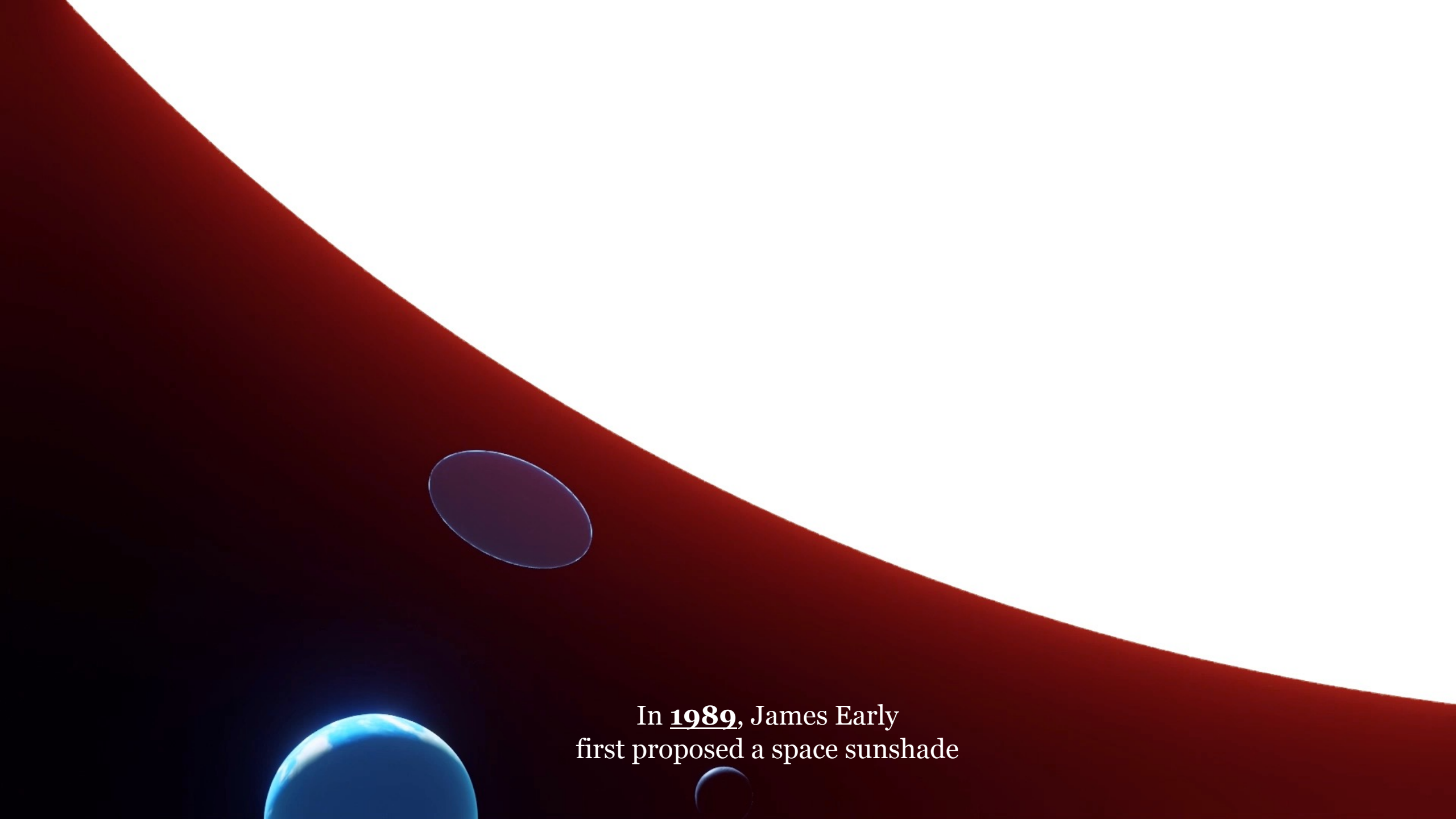


if we deflect 1.8% of incident solar radiation before it hits our planet, we could fully reverse today's global warming.



- 1.8 %

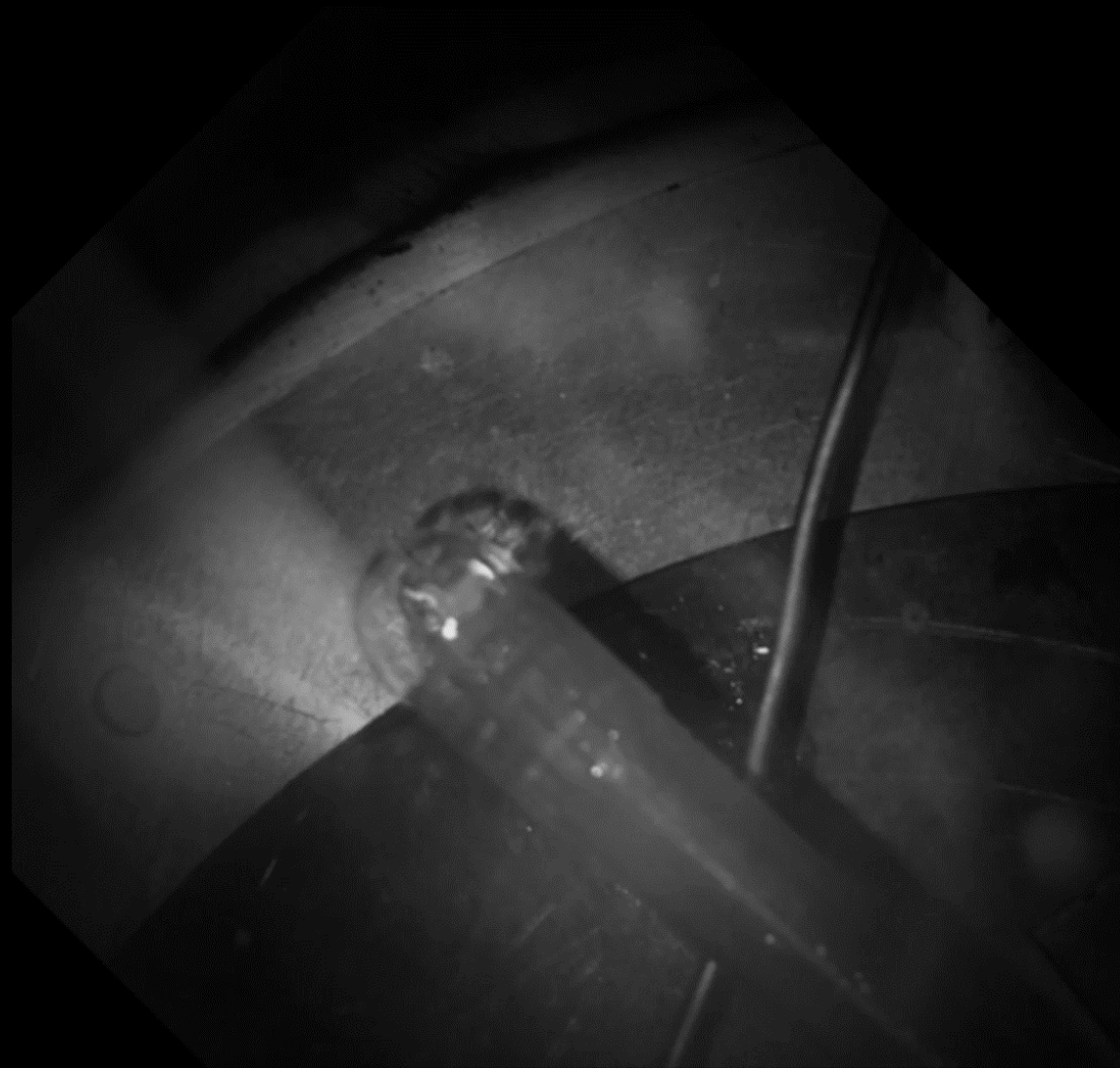




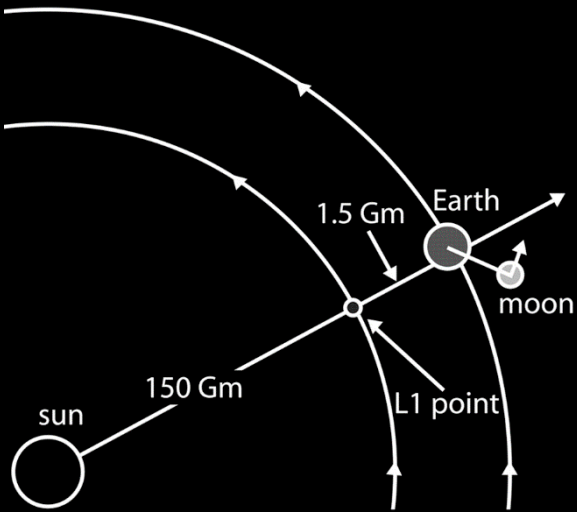
In 1989, James Early
first proposed a space sunshade



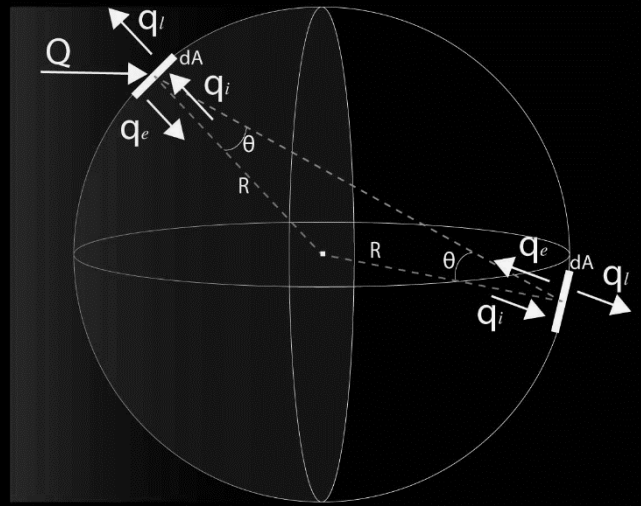
In 2006, Roger Angel
Explored a raft of shading satellites



Experiments at MIT, bubbles at zero pressure



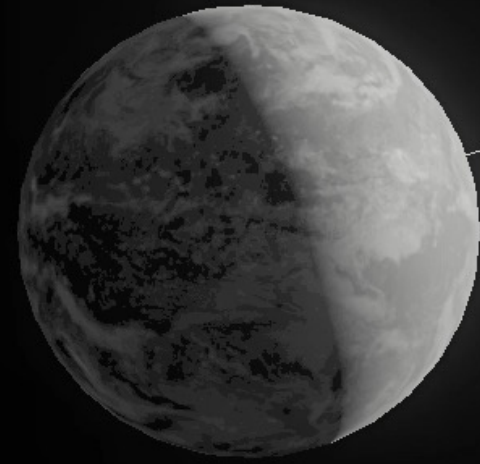
L1 Stabilization estimations conducted

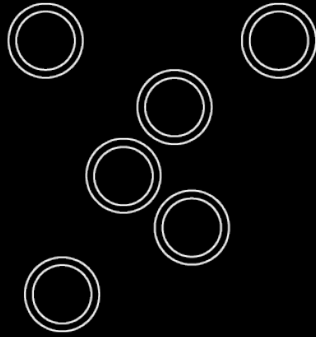


Radiation Balance calculations performed

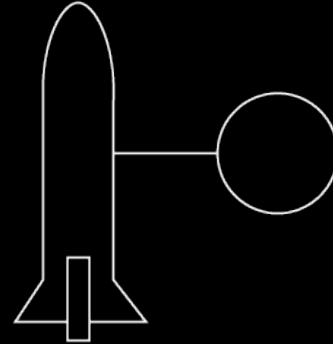


Bubbles produced at zero pressures And near-zero temperatures





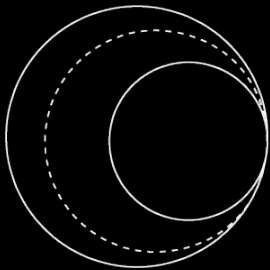
Raft Stabilization



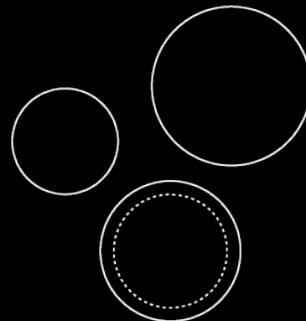
Fabrication in Space



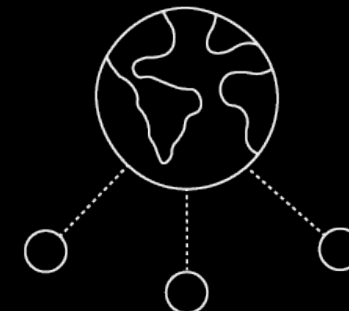
Environmental Planning



Mass and Cost Efficiency



Mass and Cost-Efficiency



Public Policy

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