

# TALOS & WP4

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ENERGY AND  
ENVIRONMENT INSTITUTE



Engineering and  
Physical Sciences  
Research Council

Engineering

Lancaster  
University



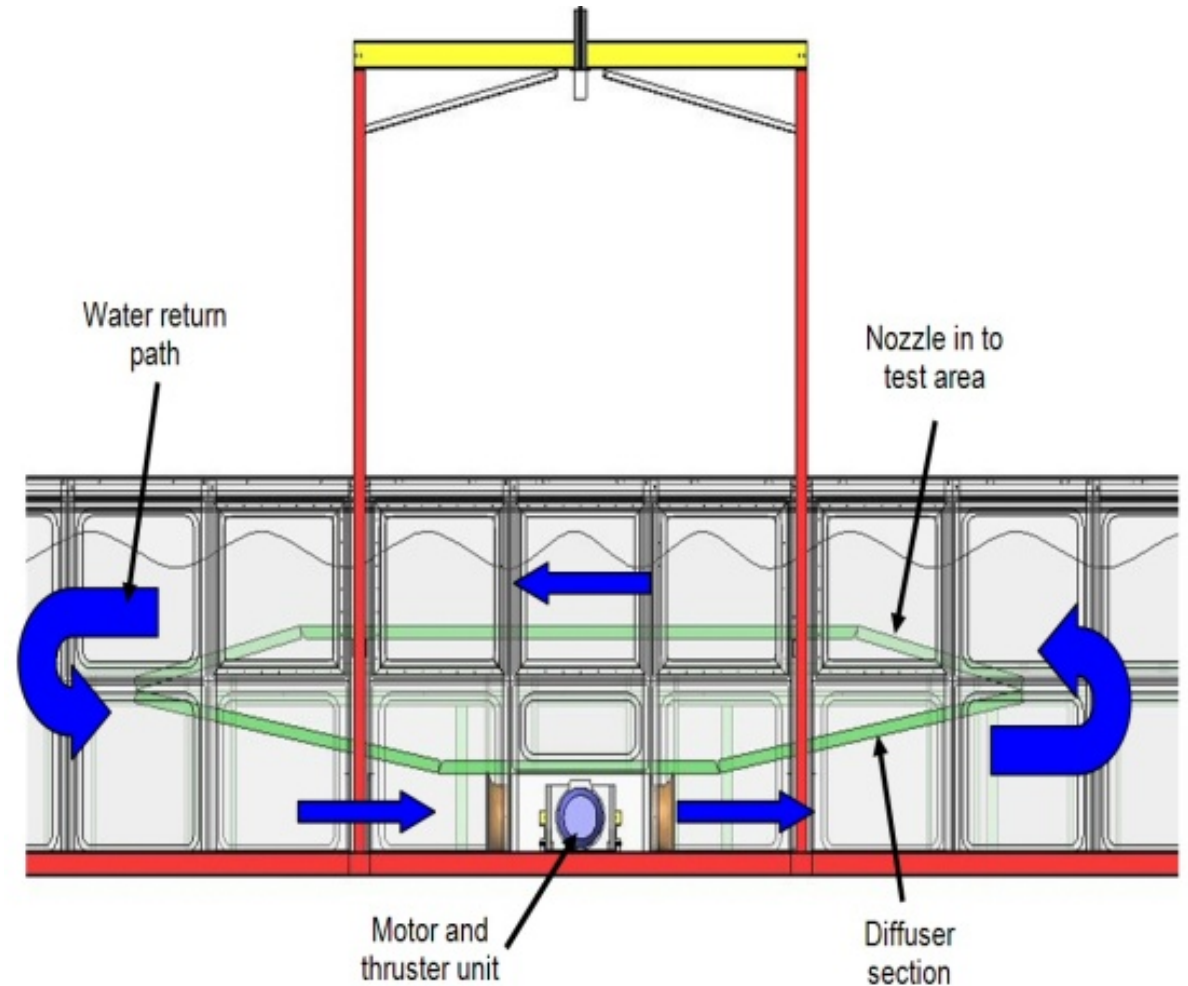
# Energy - LUREG Research

- **Research on Renewable Energy & Fluid Machinery**
  - Generic & Applied
- **Energy & Renewables**
  - Computational & Experimental Modelling
  - Device Development & Power take off
  - Computational Fluid Dynamics & Control
  - Economics, Resource & Condition Monitoring
- **Novel Topology Fluid Machinery & Turbines**
  - Computational Fluid Dynamics, Turbine Design & Analysis
  - Direct Drive & In Line Turbines
  - Siphonic Low Head & Low Cost Turbine Research
  - Fluid Machinery reliability & Energy Efficiency
- **Funded by EPSRC, Carbon Trust, EU, RDAs, Utilities and Industry**



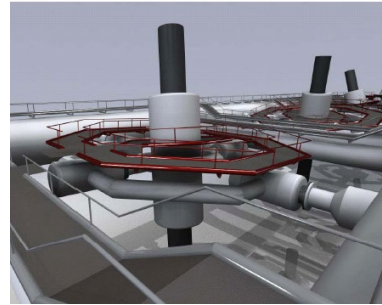
Lancaster University Engineering Building

# Waves Tides Hydrokinetics Testing Facility



# Lancaster WEC Research

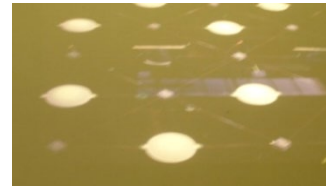
- Flexible Bag
- Flounder Array
- Frog
- PS Frog
- Frond
- Yoyo
- Pushmi
- WRASPA
- Seaweaver
- GAIA
- TALOS



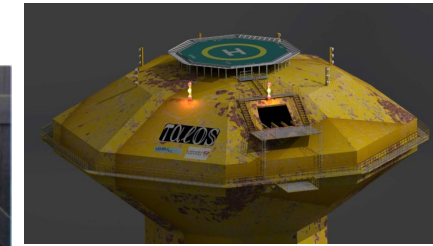
GAIA



Lancaster Flexible Bag



Lancaster Flexible Bag Attenuator



TALOS



Yoyo



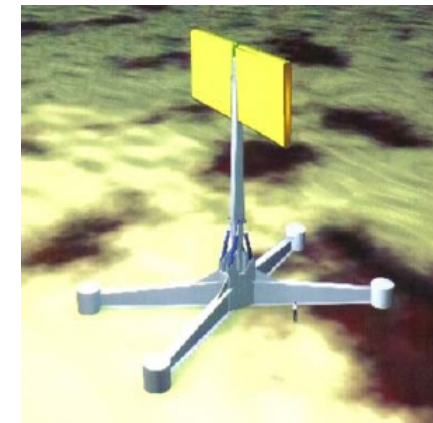
Seaweaver



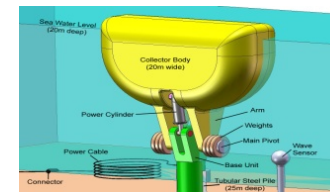
CRM PS Frog



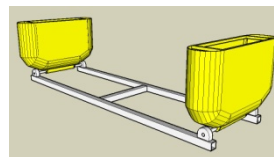
PS Frog 5



Frond



WRASPA



Pushmi



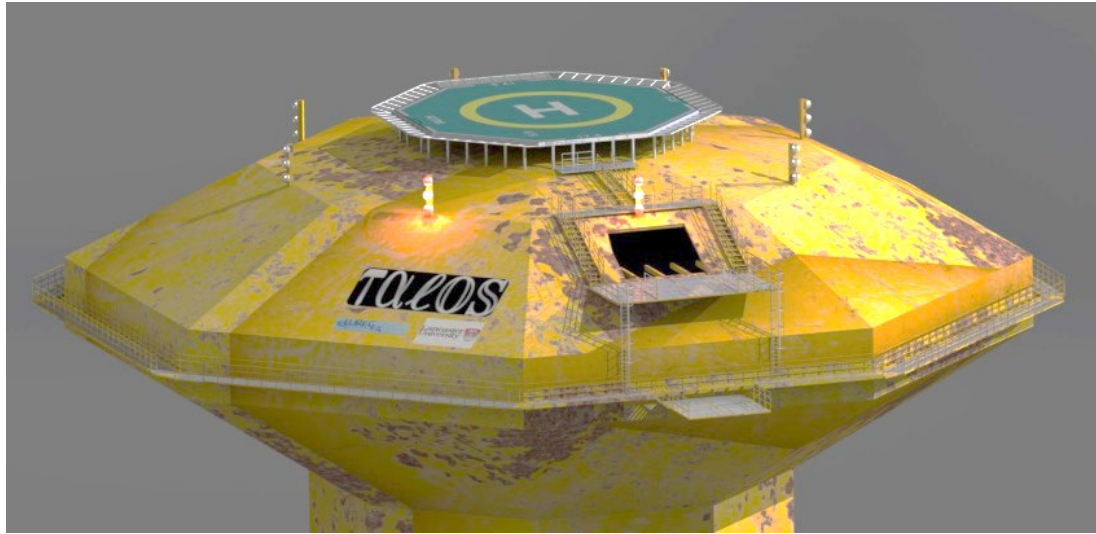
Early PS Frog



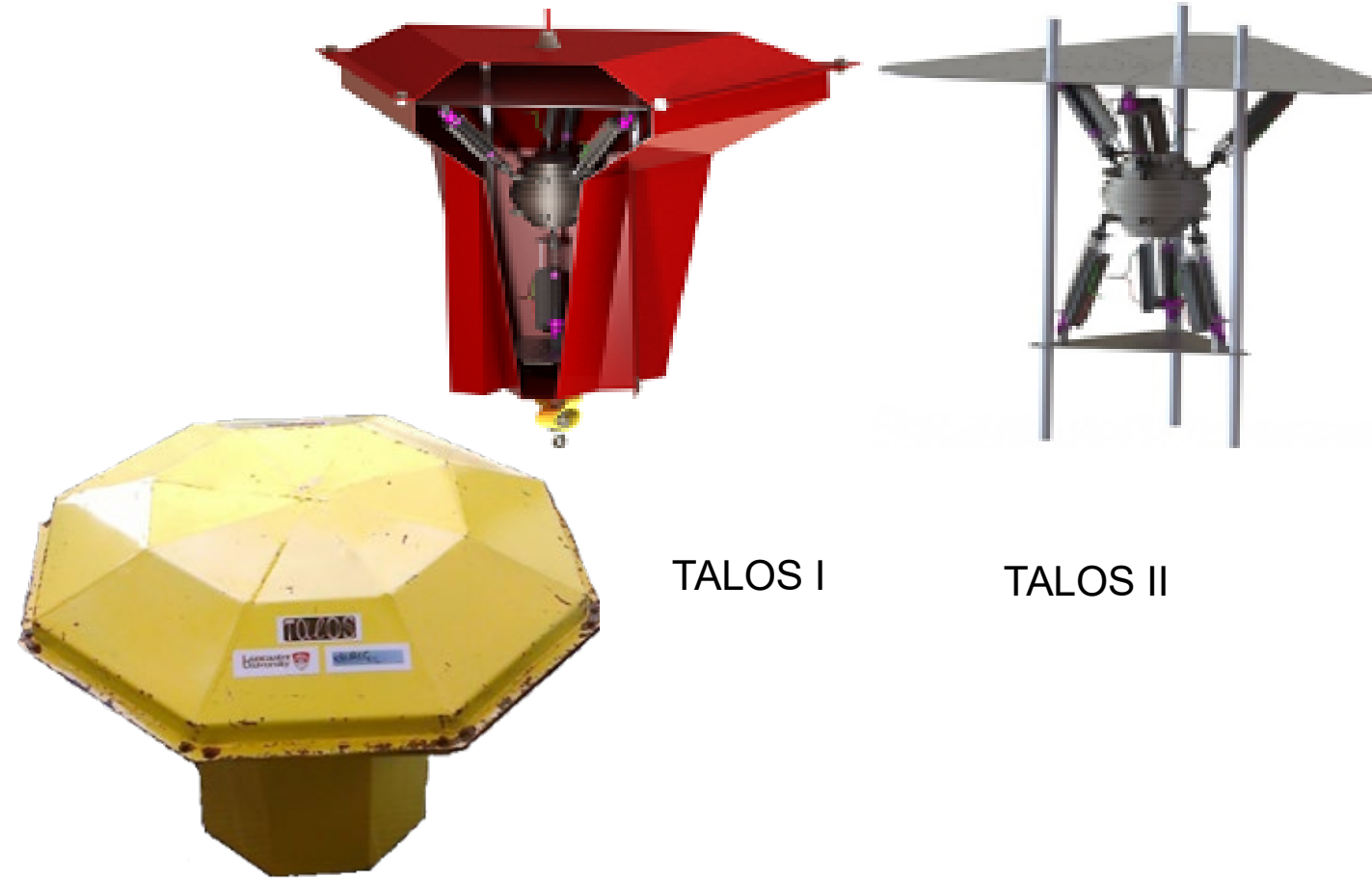
# International Network



# TALOS Wave Energy Converter



TALOS Multi Axis Wave Energy Converter System



TALOS I

TALOS II

Aggidis, G.A. and Taylor, C.J., 2017. Overview of wave energy converter devices and the development of a new multi-axis laboratory prototype. *IFAC-PapersOnLine*, 50(1), pp.15651-15656.

# WP4 – Validation and Cost of Energy



- WP 4.1 – Validation and demonstration of development
- WP 4.2 – Array Deployment
- WP 4.3 – Levelised Cost of Energy



# Conclusions

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- We have just started
- We have a plan
- But, of course ...
- We are still interested in new ideas / collaborations etc...
- Thank you

