



# Modelling Concept to Reality

Dr Carlos Perez-Collazo 10<sup>th</sup> Sep 2018



## What is Physical Modelling O UK&CHN CORE



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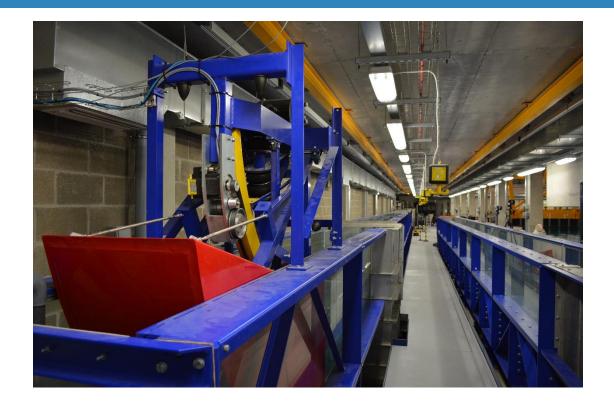


#### Why Physical Modelling? OUK&CHN CORE

- Qualitative and quantitative assessment of designs response to waves, currents and wind
- Systematic variation of wave, current and wind conditions
- Investigation of different design options
- Easier and cheaper instrumentation then at full scale
- Calibration / Validation of numerical models
- Demonstration of performance to investors
- Significant cost savings by learning about problems before going to full-scale



## **COAST Laboratory**



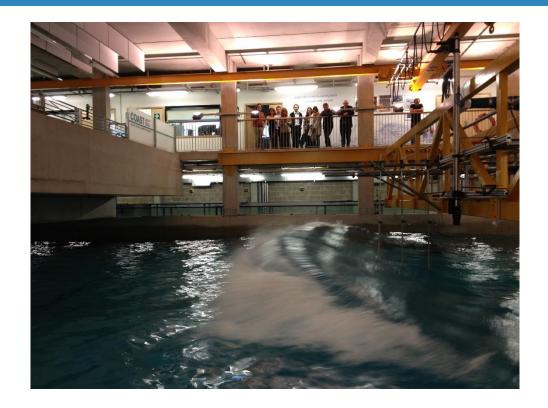


## **COAST Laboratory**



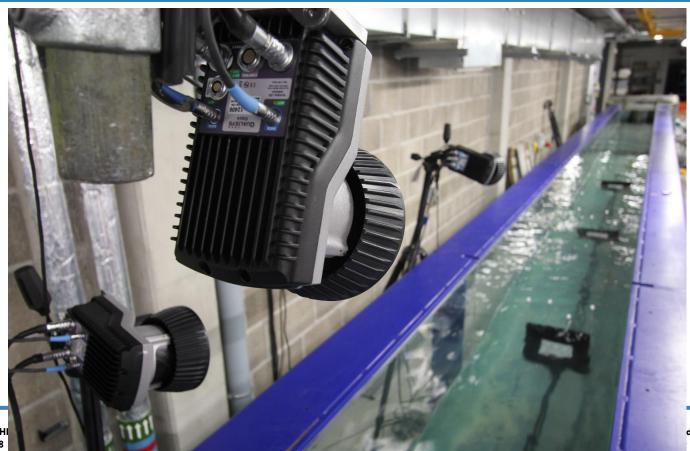


## **COAST Laboratory**









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#### **Pelamis**





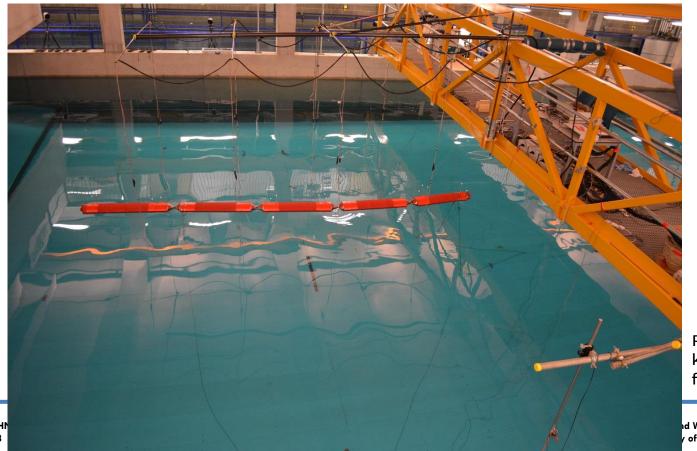
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#### **Pelamis**





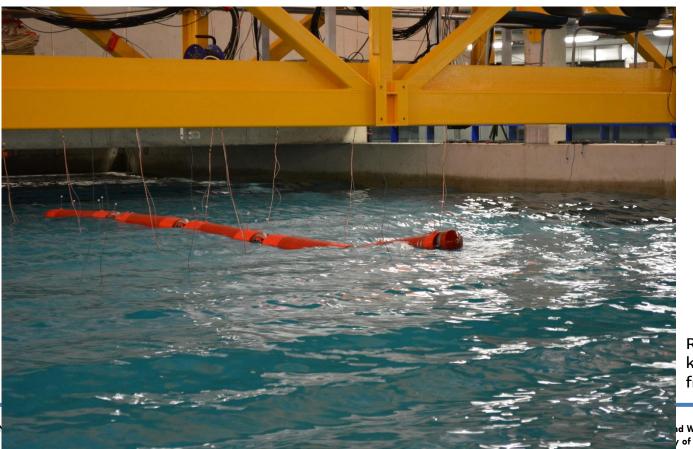
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#### Pelamis





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#### Red Paddle Co.







## Launch and Recovery



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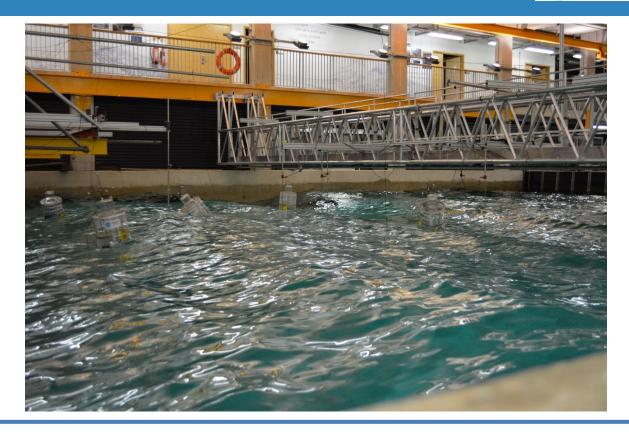


#### WETFEET





#### WETFEET





#### Detached Breakwater







