https://pearl.plymouth.ac.uk

PRIMaRE - Partnership for Research in Marine Renewable Energy PRIMaRE Summer School

2018-09-10

Summer School - Monday 10 September - Modelling Concept to Reality

Perez-Collazo, C

http://hdl.handle.net/10026.1/12649

All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.





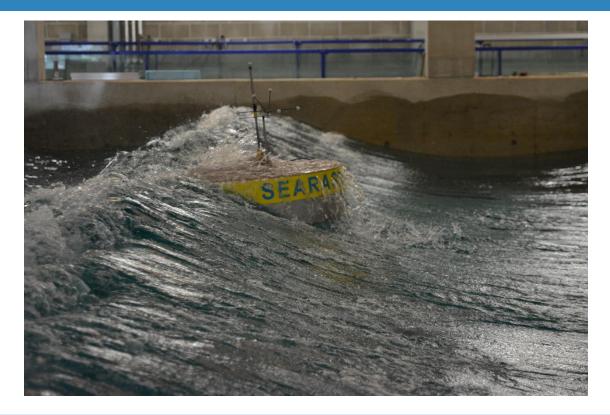
Modelling Concept to Reality

Dr Carlos Perez-Collazo 10th Sep 2018

Joint PRIMaRE and UK&CHN | CORE Summer School 10-14th of September 2018 Hydrodynamic Modelling and Well-being in Engineering University of Plymouth (COAST Lab) and University of Exeter (Penryn Campus)



What is Physical Modelling **OUK&CHN** CORE



Reproduced with kind permission from Searaser Ltd.

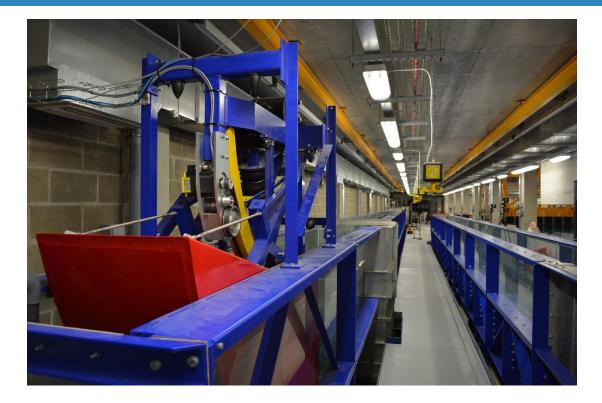


- Qualitative and quantitative assessment of designs response to waves, currents and wind
- Systematic variation of wave, current and wind conditions
- Investigation of different design options
- Easier and cheaper instrumentation then at full scale
- Calibration / Validation of numerical models
- Demonstration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



COAST Laboratory







COAST Laboratory

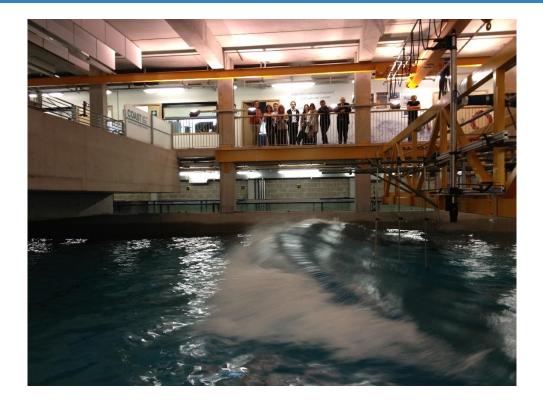






COAST Laboratory













Reproduced with kind permission from Polygen Ltd.

d Well-being in Engineering of Exeter (Penryn Campus)

Joint PRIMaRE and UK&CHI 10-14th of September 2018









Joint PRIMaRE and UK&CHI 10-14th of September 2018 Reproduced with kind permission from Polygen Ltd.

d Well-being in Engineering of Exeter (Penryn Campus)









Reproduced with kind permission from Polygen Ltd.

l Well-being in Engineering of Exeter (Penryn Campus)

Joint PRIMaRE and UK&CHI 10-14th of September 2018



Polygen





Reproduced with kind permission from Polygen Ltd.

Well-being in Engineering of Exeter (Penryn Campus)

Joint PRIMaRE and UK&CH 10-14th of September 2018









Source: http://renews.biz/10 1935/end-is-nighfor-pelamis-device/

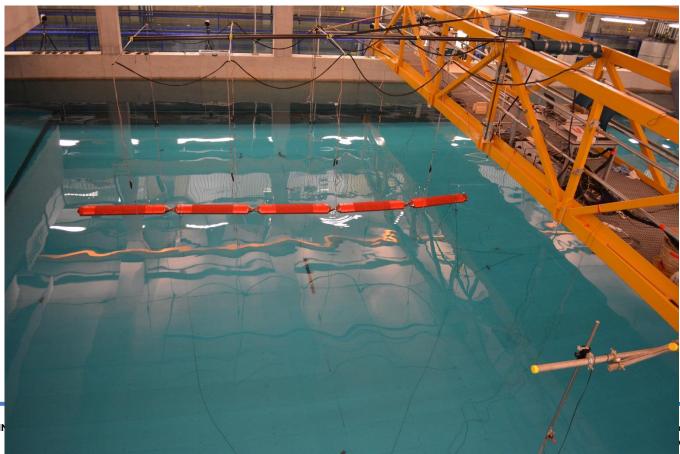
ing and Well-being in Engineering versity of Exeter (Penryn Campus)

Joint PRIMaRE and UK&CHN | COF 10-14th of September 2018









Reproduced with kind permission from Pelamis Ltd.

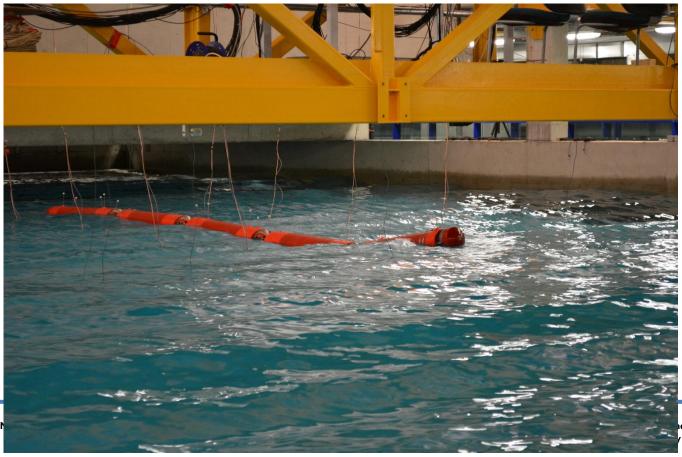
nd Well-being in Engineering y of Exeter (Penryn Campus)

Joint PRIMaRE and UK&CH 10-14th of September 2018









Reproduced with kind permission from Pelamis Ltd.

nd Well-being in Engineering y of Exeter (Penryn Campus)

Joint PRIMaRE and UK&CH 10-14th of September 2018



Red Paddle Co.







Launch and Recovery

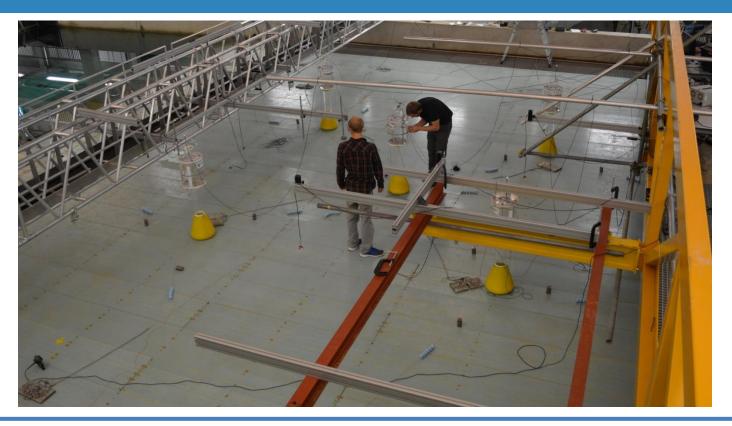








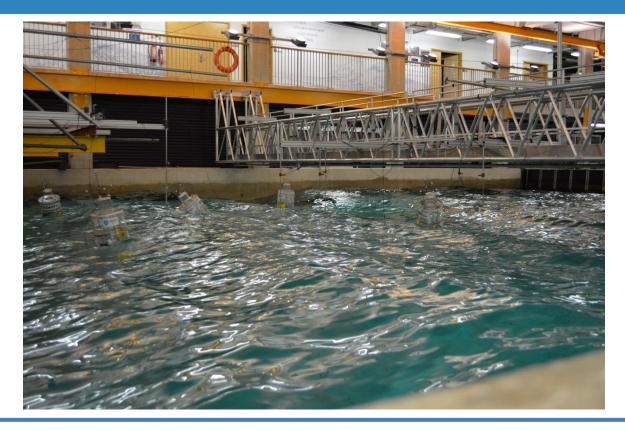














Detached Breakwater









