

INTERNATIONAL WORKSHOP ON

# Data-Centric Engineering

SAMBERG CONFERENCE CENTER,  
CAMBRIDGE, MA  
DECEMBER 9–12, 2019



program and  
abstracts



The  
Alan Turing  
Institute



# panel discussions

## **SENSING, INSTRUMENTATION, AND DATA-CENTRIC MODELING IN CIVIL INFRASTRUCTURE AND TRANSPORTATION**

PANEL 1. MONDAY, DECEMBER 9TH, 2019  
11:30

*Matt DeJong, Lord Robert Mair, Allen Marr, Carolina Osorio*

## **INFERENCE AND LEARNING IN ENGINEERING**

PANEL 2. MONDAY, DECEMBER 9TH, 2019  
16:15

*Tamara Broderick, Yannis Kevrekidis, Youssef Marzouk, Andrew Stuart*

## **THE DATA-CENTRIC ENGINEERING FUTURE IN FLUID DYNAMICS**

PANEL 3. TUESDAY, DECEMBER 10TH, 2019  
11:30

*Karthik Duraisamy, Petros Koumoutsakos, Omar Matar, Themis Sapsis*

## **DATA-CENTRIC ENGINEERING IN MATERIALS**

PANEL 4. TUESDAY, DECEMBER 10TH, 2019  
16:15

*Sir Harry Bhadeshia, TBC, Philip Withers*

## **DATA-CENTRIC TECHNIQUES IN ENGINEERING DESIGN & DECISION MAKING**

PANEL 5. WEDNESDAY, DECEMBER 11TH, 2019  
11:30

*Omar Ghattas, Sertac Karaman, Karen Willcox*

## **TOWARDS DATA-CENTRIC PETROLEUM ENGINEERING**

PANEL 6. WEDNESDAY, DECEMBER 11TH, 2019  
16:15

*Amr El Bakry, Kody Law, Dean Oliver*

# panel discussions



## **DATA-DRIVEN METHODS IN COMPUTATIONAL MECHANICS**

PANEL 7. THURSDAY, DECEMBER 12TH, 2019

11:30

*Paul Barbone, Stéphane Bordas, Roger Ghanem*

## **EDUCATING THE EXISTING WORKFORCE AND THE NEXT GENERATION OF DATA-CENTRIC ENGINEERS**

PANEL 8. THURSDAY, DECEMBER 12TH, 2019

13:45

*Omar Matar, Youssef Marzouk, Justin Newcomer*

## **FUTURE FUNDING STRATEGIES**

PANEL 9. THURSDAY, DECEMBER 12TH, 2019

14:30

*Vipin Chaudhary, TBC, Mark Girolami*