

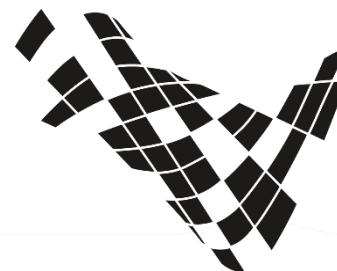


The
University
Of
Sheffield.

Acoustics Research At DRG

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January 2018

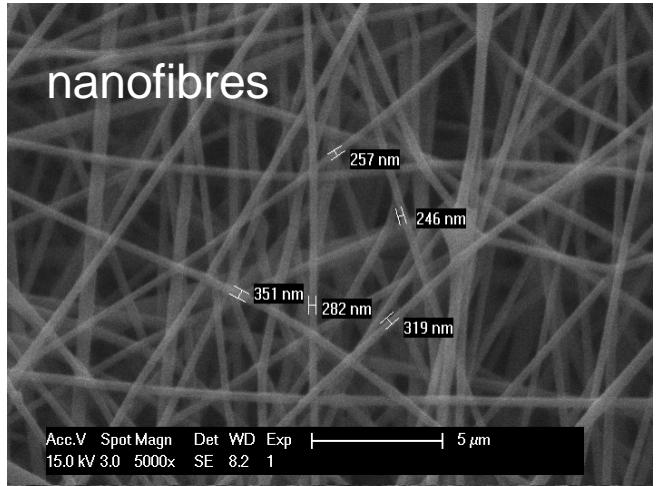


Dynamics
Research
Group

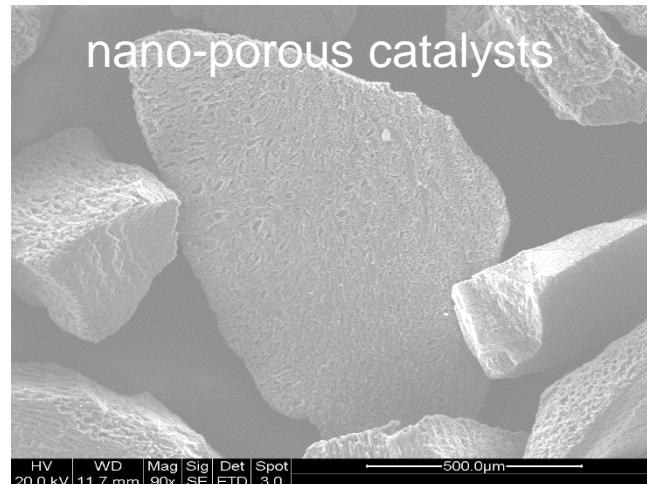
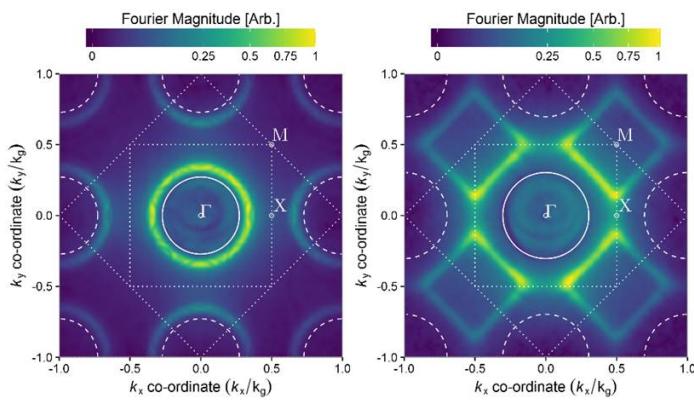
MAIN DIRECTIONS

- Acoustic materials
- Acoustic sensors
- Sound propagation modelling
- Collaborative work

ACOUSTIC MATERIALS



meta-materials



ACOUSTIC SENSORS (1)

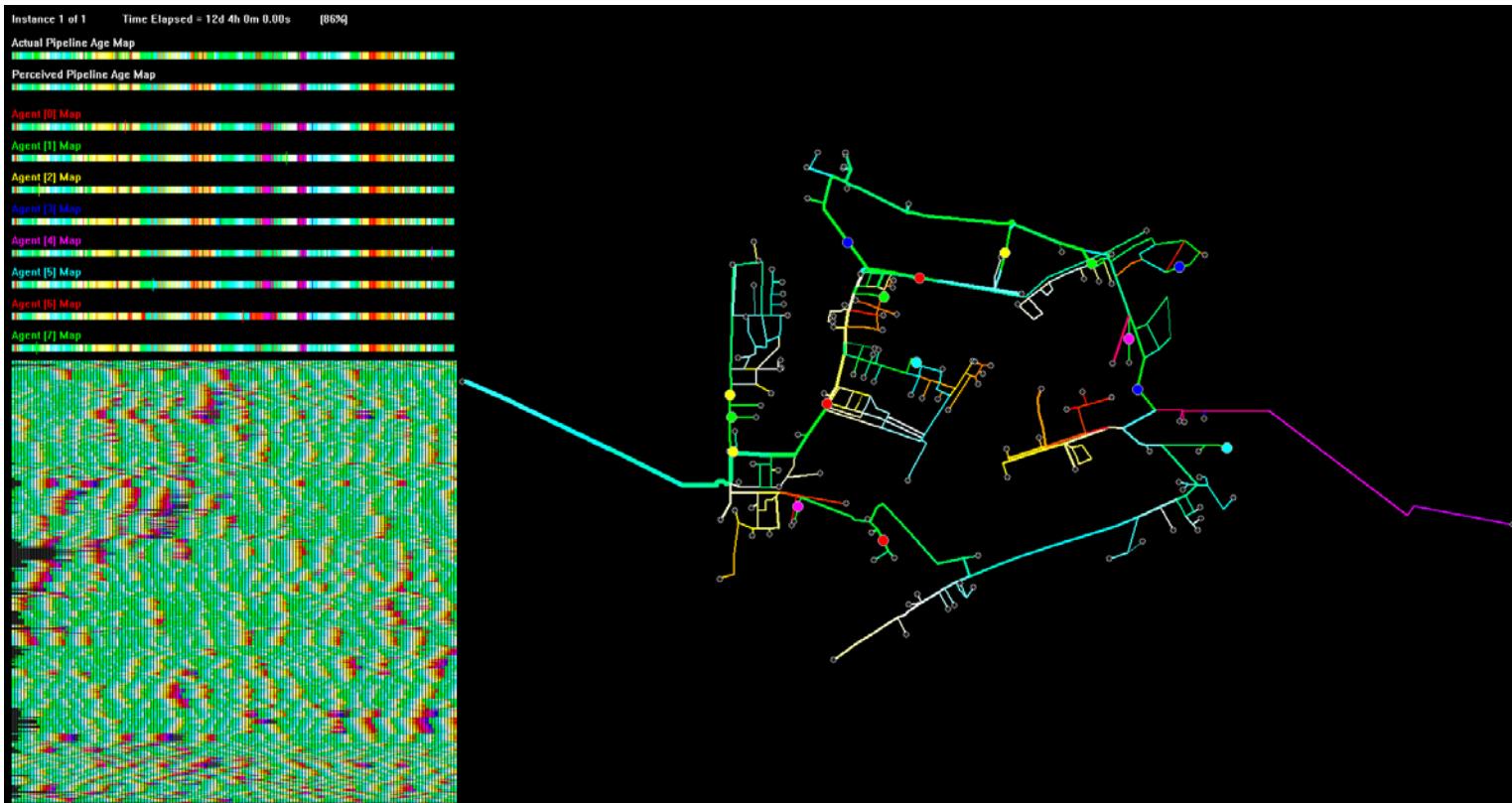
for open channel flow characterisation

for pipe inspection



ACOUSTIC SENSORS (2)

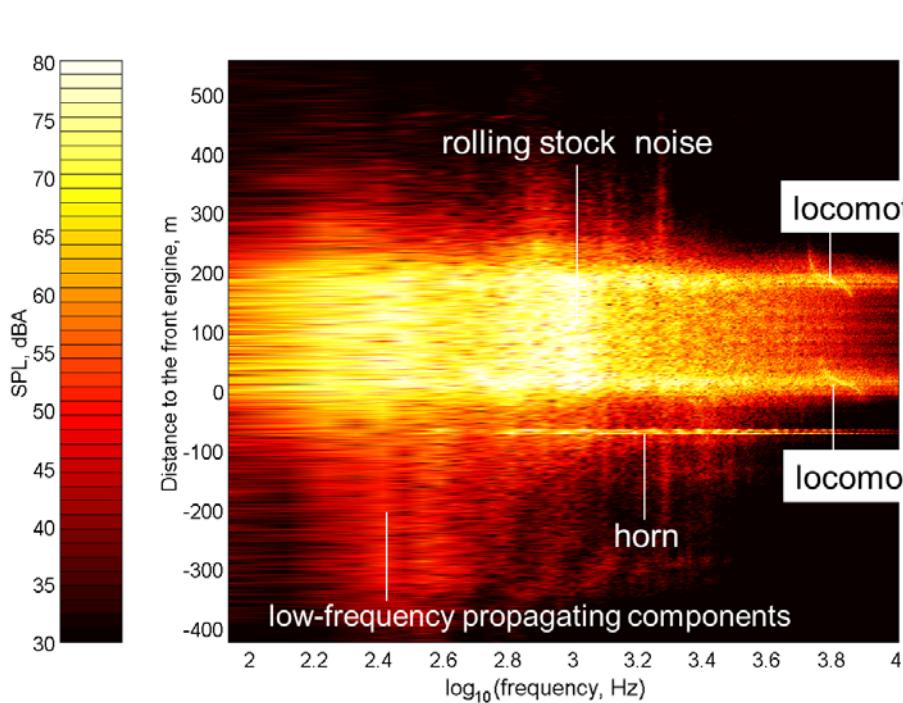
simulation of the behaviour of autonomous sensors in pipe networks



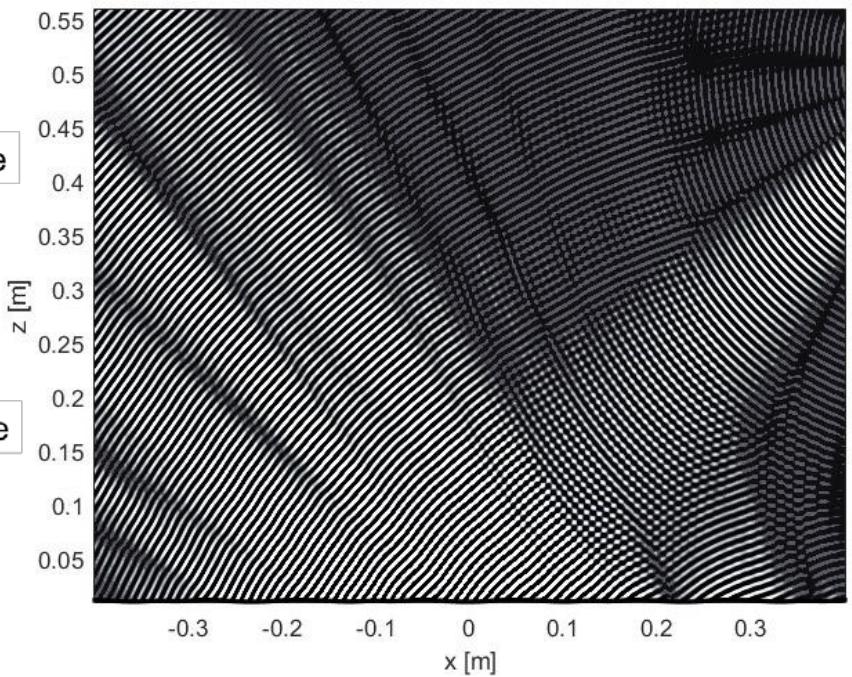
<https://youtu.be/-9p3KOMeTVY>

SOUND PROPAGATION MODELLING

uncertainties in sound propagation



rough surface scattering



AREAS FOR POTENTIAL FOR COLLABORATION

- Non-linear sound in application to SHM
- Pattern recognition applied to acoustic signatures
- Application of sound to material characterisation
- New acoustic sensor delivery platforms including robotics