## Café Scientifique Headingley

Monday 11th February 2019 at 7:30pm

**Speaker:** Klaus Witte

Title: Heart Rate in Heart Failure –

a new approach for an old measure



## **Outline:**

Heart rate is the most basic measure of heart function and is almost the first thing that every doctor checks. A 'too slow' or 'too fast' heart beat is a common cause of symptoms and can be treated with tablets or a pacemaker. But what is 'too slow' or 'too fast'? Surely everyone is an individual - how can we assess what's 'too slow' or 'too fast' and do the normal rules apply to people with heart problems.

Dr Witte is an expert in heart failure, pacemaker therapy and has spent the last fifteen years exploring heart rate and its effects on exercise capacity and will describe a new technique for assessing the optimal heart rate range in any individual and the benefits in some of controlling the heart rate to within that range.

**Biog:** Klaus Witte is a Senior Lecturer and Consultant Cardiologist in the Leeds Institute of Cardiovascular and Metabolic Medicine at the University of Leeds. His research interests include vitamin D in CHF, and he was the principle investigator of the largest study of vitamin D supplementation in CHF which showed a clinically important increase in LV function following one year of vitamin D. His work on the influence of heart rate on exercise capacity in heart failure, around the hypothesis that exercise intolerance in heart failure is not the result of poor heart rate rise (chronotropic incompetence) took a step forward following a series of studies collated in 2016. He has subsequently described, using a reproducible non-invasive technique to measure the force-frequency relationship developed in Leeds, that patients with heart failure have a flat force frequency slope, and low peak contractility which occurs at a lower heart rate than in controls. This finding and a short term randomised cross-over study describing the benefit on exercise capacity of programming pacemakers using patients' own force frequency relationship information were published in JACC-HF in September 2017.

**Venue**: The New Headingley Club 56 St Michael's Rd., Leeds LS6 3BG

**Time:** Club opens at 7:00pm for drinks & the room at 7:30; talk begins promptly at 7:45pm

Entry: Donation please for room hire and expenses: £3 at the door



Café Scientifique Headingley is a programme run under the auspices of the Headingley Development Trust www.headingleydevelopmenttrust.org.uk