## Flow, Nets and GPs

Hazel Davey\*†1

<sup>1</sup>Institute of Biological, Environmental and Rural Sciences (IBERS) – Aberystwyth University Aberystwyth Ceredigion Wales, United Kingdom

## Abstract

Flow cytometry has a long history for the analysis of microorganisms and developments in hardware have improved sensitivity and increased the potential for multiparametric analyses. However, in contrast to advances in the technology that underpin flow cytometry, there has not been concomitant progress in the software tools required to analyse, display and disseminate the data and manual analysis of individual samples remains a limiting aspect of the technology. Genetic programming, principal components analysis and artificial neural nets are compatible with the classification problems commonly encountered in flow cytometry and their use will be illustrated using a flow cytometric classification problem.

**Keywords:** Genetic programming, artificial neural nets, flow cytometry

<sup>\*</sup>Speaker

<sup>&</sup>lt;sup>†</sup>Corresponding author: hlr@aber.ac.uk