Abstract:
Brain imaging shows two well-known networks involved in cognitive control – a multiple-demand or MD network, whose activity usually increases with increased task demand, and a default-mode network (DMN), especially active during rest. Here I shall discuss their complementary contributions to cognitive control, presenting a combination of behavioural, anatomical and imaging data. The MD system, I suggest, is involved in splitting complex problems into fine-grained, focused parts or attentional episodes, a function closely related to fluid intelligence. In contrast, the DMN encodes spatial, temporal and other aspects of broad context, providing the setting for more focused cognitive operations.

All welcome to attend.