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**BILINGUALISM BEYOND LANGUAGES:
THE NEURAL IMPACT OF BILINGUALISM**

Vortrag am 6.12.17 um 18 Uhr c.t.
in Raum S005 / Schellingstraße 3 (VG)

The human brain has not only evolved to accommodate a single language but is, in fact, fully equipped to acquire more than one language as in bilingual and multilingual individuals. However, bilingualism does not only express itself as the ability to speak more than one language but appears to shape individual performance on tests of cognitive functioning. The cognitive processes most likely to be affected by bilingualism are those involved in cognitive systems orchestrating resources assigned to attentional and executive control.

Beyond behavioural differences, bilingualism seems to affect brain structure as well. Indeed, bilingualism induces experience-related structural changes (i.e., in terms of increased grey or white matter density) in areas that are 1) part of the executive control network such as the frontal lobes, the left inferior parietal lobule, the anterior cingulate cortex (ACC), and in subcortical structures such as the left caudate and left putamen and 2) part of the lexico-semantic system such as the temporal lobes. The primary goal of my presentation is to provide an overview of the functional and structural changes induced by bilingualisms, and, second, to illustrate specifically how eventually these brain changes may protect the human brain from cognitive decline during healthy aging.