Music & Brain

What happens in your brain when you are listening to music or are playing an instrument? High-end auditory stimulation such as music activates in parallel many regions of the brain. The primary auditory cortex processes tone pitch and melody. Pursuant to increasing music experience the cells of the primary auditory cortex are modified and also regions of more distal brain areas such as the secondary auditory cortex or regions associated with procession of rhythm or harmony are affected. This so-called neuronal plasticity leads to a re-organisation of neurons within these areas and to the formation and consolidation of long-lasting memories. This explains why patients with dementia often recall melodies learned many years past.

To highlight the importance of brain plasticity and high-end mental endeavours as factors that may help delaying age-related dementia, the DZNE will host a series of lectures and concerts at the