

# Investigating the ageing brain

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## Living longer doesn't necessarily mean living healthier

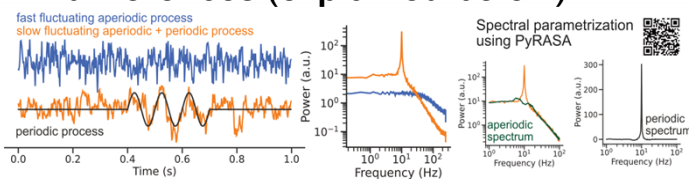
- The WHO projects that from 2015 to 2050 the share of over-60-year-olds will double and the share of over-80s will quadruple
- While life expectancy climbs, healthspan—the years lived free of serious illness—remains flat
- Neurological disorders and depression are among the leading causes of healthy years lost due to disability
- How can we quantify whose brain is ageing “healthy” and which factors contribute to “unhealthy” brain ageing?



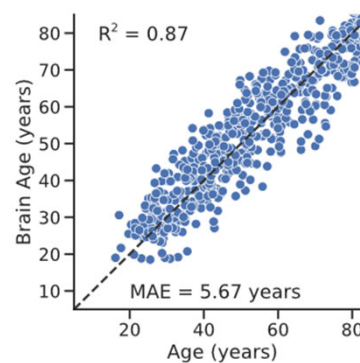
## Estimating BrainAge using MRI & MEG

BrainAge was quantified by predicting age using..

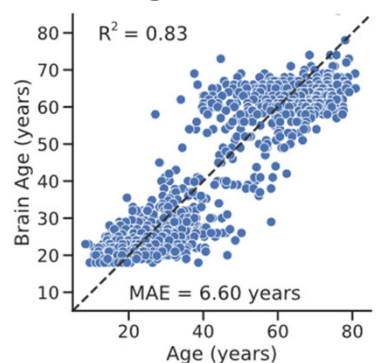
- MRI: volumetric, thickness & area related differences
- MEG: power spectral differences (explained below)



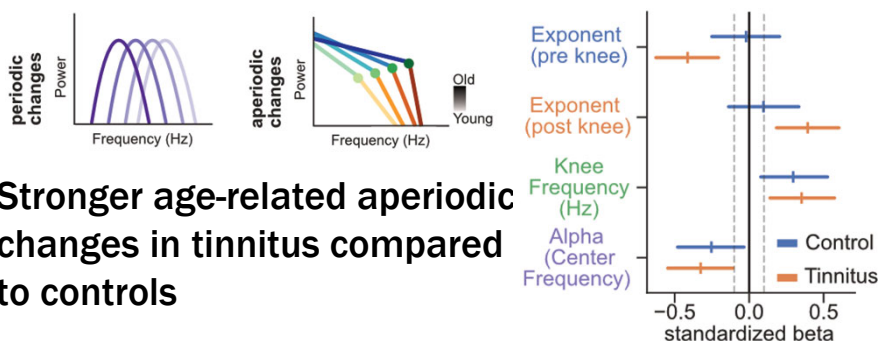
660 subjects from CamCan (MRI + MEG)



1099 subjects from Salzburg (MEG)



## Accelerated brain ageing in tinnitus?



**Stronger age-related aperiodic changes in tinnitus compared to controls**

## Cooperation CDK-PLUS



Prof. Eugen Trinka



Prof. Nathan Weisz



Prof. Martin Kronbichler



Dr. Fabian Schmidt

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