

How to define the lateral fiducials?

- Consistency is key when using fiducials; collaborative or data mining projects become impossible without accurate position labels.
- Traditionally in EEG, the terms **Left/Right PreAuricular (LPA/RPA)** are used to refer to the ear fiducials.
- While **LPA/RPA** are palpable anatomical features, they are difficult to locate in anatomical MR head images.
- To address this issue and allow for MR coregistration, various labs utilize in-house fiducials (unfortunately, some do so while retaining the **LPA/RPA** label).
- We suggest using the terms: **Left|Right Helix-Tragus Junction (LHJ|RHJ)**, **Left|Right Ear canal (LEC|REC)**, **Left|Right Helix-Scalp Junction (LHS|RHS)**, and **Left|Right PreAuricular (LPA|RPA)**.
- We strongly recommend the use of the **Left|Right Helix-Tragus Junction (LHJ|RHJ)** as the *get_chanlocs* lateral fiducials, as these are best defined in *both* 3D and MR head images.
- For a detailed discussion on ear fiducials from the Donders Centre in Nijmegen, please visit: http://www.fieldtriptoolbox.org/faq/how_are_the_lpa_and_rpa_points_defined/

