

# Review 1

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## Review

General comment

This extended summary compares two EEG prediction pipelines: a model based on characteristics using spectral parameters (FOOOF, alpha peak, band powers) and a base model driven directly on raw EEG signals. The context of the EEG Foundation Challenge 2025 is correctly laid out. The summary is quite clear, however it remains very general and leaves the reader hungry: it describes intentions but does not really go into the technical details of the work done.

Strengths

The structure of the text is clear and follows the conventions. The definitions of the four psychological dimensions are well formulated and facilitate the understanding of the challenge framework. The purpose of the subject is interesting because it can talk to everyone.

Weaknesses

The content remains superficial and lacks methodological precision. Several passages are generic descriptions ("data collected with a net 128 channels", "alpha peak extraction", etc.) without specifying how this is actually implemented. Key technical details are missing: preprocessing, PSD calculation, FOOOF parameters, MLP architecture and hyperparameters, foundation model details, data volume used, training/validation strategy. It is not proposed quantitatively and objectively to compare the 2 methods. The "Expected Results" section remains very vague and does not formulate any concrete assumptions. In the end, we do not really understand what has been achieved, nor the real difficulties of the subject.

Quality of writing

The writing is clear but seems detached from experimentation

## Reviewer's confidence

1: No, I don't feel comfortable with this topic and/or methods

## Usage of LLM

2: Yes, a bit

## Confidential remarks for the program committee

The summary is clearly written and well structured, but it remains of a fairly high level and leaves out many methodological details. He could leave some of the readers hungry... maybe because he didn't have time to dive into the study because it was very complex theoretically.