AITP'23 PANEL

Panelists: Tomas Mikolov, Ben Goertzel, Mike Douglas, Moa Johansson, Andras Kornai, Alison Pease, Stephan Schulz, Mario Carneiro

General topic: The "(L)LM revolution", its relation to A(G)I and possibly math, science, theorem proving/formalization, etc.

Tomas's question: Do you think LMs can lead to AGI?

Mike's questions:

1. Current LLMs are not very good at logic and math, is this a technical problem to be solved or a fundamental difficulty?
1a. Is there any barrier to transformer models verifying a logical argument or formal proof with 100% accuracy?
1b. Likewise for *finding* logical arguments and formal proofs
1c. Are there well defined tasks which we can argue transformers are bad at? For example tree search (this would answer 2b).

2. If a future LLM can make mathematical arguments in natural language, what is the value of formalization (formal math, logic, ...)?

3. which are better for our current applications: the best commercial (closed source) models, or custom fine tuned open source models?

Josef's question: Are there "clearly better" neural alternatives (GNNs, RNNs, new ones/combinations) to the current transformer models?