I am prepping for my MIT/Cornell trip and I've been going through these two papers again:

- https://people.csail.mit.edu/nickolai/papers/gilad-algorand-eprint.pdf
- https://arxiv.org/pdf/1406.5694.pdf

My current impression from these papers is that a Casper friendly block proposer (CFBP) doesn't seem that hard of a problem. Assuming Casper FFG is 100% working, all we really need is a controlled, rate-limited way to grow the block-tree that is resistant to various attacks and griefing vectors—that doesn't seem so difficult!

But if this problem was really "not so difficult", I suspect@vbuterin would have already solved it. And given that he hasn't, I suspect I am missing something.

Ergo, I ask the team:

1. What are the functions CFBP must serve?
2. What are the engineering properties CFBP must satisfy?

And I will then investigate how well the current state of the art satisfies these.