

# Hypersurreal?

Hypersurreal • 4 Dec 2023

But why?

Why not 🙄 Really tho, the reason I choose to use the term hypersurreal is because things are done a certain way within the surreal numbers & combinatorial games. However as vast as the field may be, it still limits itself in many ways. 2 players. Competitive. Partizan. Impartial. Maybe misère.

There seems to be *very* limited work done on 1-player games (combinatorial puzzles - although it is interesting to note that impartial games can be viewed as puzzles). There is a lot of interesting information around “0-player” games ([cellular automaton](#)). However I haven’t seen anything about the maths for these types of “games”.

I did find some interesting oscillators tho:

Suns, Moons & Stars?

Suns, Moons & Stars?

Normal time?

Normal time?

Loopy time?

Loopy time?

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Also, what about [cooperative games](#)?

**Aside** I find [mechanism design](#) rather interesting.

On top of all of that, ever since learning about transfinite recursion there is now constant recursion (re)occurring. Surcomplex? Sounds good. I’ll take some surdenians as well plz & ty (& yes.. I would like to know about the  $\omega$ th step in the [Cayley-Dickson construction](#), ty kindly).

