Real world is often misleading.

Finding thing theory.
Historically, string theory was closely connected to particle physics and the ambitious program of Unification, $SU(3) \times SU(2) \times U(1)$ Anom Cancellation + Eg x Eg Het String + "stringy" mechanisms to solve GUT problems

\[ \mathfrak{su} \oplus \mathfrak{d} \oplus \mathfrak{l} \oplus \mathfrak{e} \oplus \mathfrak{n} \]

16 of $SO(10)$

MIND-BLOWING!
Stabilizes weak scale \( \hat{m} \)
Pre-LHC: Many (not all!) leading string theorists:

"(1) LHC will discover SUSY, (2) String Theory Loves SUSY + Unification"

Now: ... CICADAS...

(Anyway, String Theory is mainly about Quantum Gravity...)
But makes connection to particle physics

Even more extreme unification!

Universe

Here, accidentally!

Lethal + Empty Everywhere

$\sim 10^{100}$ worlds?
Much more plausible with landscape looks crazy without landscape.

Correctly predicted $100 \geq \text{yr} > 135 \text{gyr}$.

Fermions

$\text{CP moduli...}$

$_{\text{flavor}}$ 

$\text{Dark Matter}$

Scalars

$\text{Unification}$

$T^\text{ew}$

Reason:

$100 \geq \text{yr}$

$T^\text{ew}$

Scalars don't nearly reannihilate fermions.

For splitting:

Min. of $0.6\text{yr}$ requires $15\text{yr}$.
The long run...

But in my view a real mistake in

* Ununderstandable as a short-term strategy

* Physics of the real world

longer actively pursuing something to particle

Spanning theories are for the most part no
in "search for death" finst der Tod.

real world I think we are frustrated to the particle physics of the parallel seems directly converted in theoretical physics and the magical structure we have encountered string theory remaining the most
We humans could tend to pose for ourselves deeper and more fruitful than ones questions raised by Nature are vastly about physics and much (than physics and metaphysics)

The real world knows especially more for creative reasons

But reasons (Ruling out ideas...) but

World not for punitive

Think of coming to the real
$L_{ads} \sim \frac{1}{H}$

$\gamma$ just barely has ADS x S vacuum

Explained by Witten CFT

\[ \gamma = \frac{\text{toward}}{\text{min}} \]

\[ \theta = \frac{\text{sin} \theta}{\text{min}} \]

\[ \text{What is } \Theta \text{ (less than 100)?} \]

(i) General in SM almost simplest/chieflly (they)

Funny Guess!
* \[ \text{Recently some "local density phenomenon" seen} \]

\[ \text{as } V = \int df = 0 \text{ (local density)} \]

\[ \text{because of "Akh-Har-Deine-Smithy", later} \]

\[ \text{seen as } V \geq 0 \text{ more, } V \geq 0 \text{ no extra} \]

\[ \text{this help with A/I in my problems} \]

\[ \text{Wilson Paradigm - why haven't we seen} \]

\[ \text{We know } \nabla \nabla \nabla \text{ in gravity indices} \]

\[ \text{N/I/R + N/A/R/V} \]
The text is handwritten and contains a mix of different subjects, including math, chemistry, and biology. The handwriting is somewhat difficult to read, but some key points include:

- A discussion about a formula, possibly related to pH or another chemical concept.
- A mention of ADS, possibly referring to an academic or professional setting.
- Some text discussing precise statements, possibly related to chemistry or biology.
- A discussion on ETs, which might be related to extraterrestrial life or electrical topics.

The handwriting is a bit scattered, but it appears to be a mix of notes and thoughts on various topics. The exact content is not entirely clear due to the handwriting style.
Sting Theory...

Shoes signs of connectivity + extending to... but deeply connected to real world.

Already making in particle amps - hidden.

Huge extra magic in flat space limit (unit seen in flat space) - One Unified Theory.

AUS

VS
Approximate Statements About Real World

Driven more by “external/divine magic”

Exact Statements about Imaginary Worlds

[That you might even engineer in a lab somewhere]
World out There!

Remember there's a big fun, stimulating and great hang out with experimentalists - theorists can play a big role.

Biggest challenge of particle physics: Getting New Experimental