S03E08 -

The Multiverse Employee Handbook - Season 3

The Multiverse Employee Handbook defines an *Interstellar Visitor* as “any celestial body, fragment, or unannounced cosmic drifter entering corporate jurisdiction without a fixed return trajectory or valid parking permit.”

According to Regulation Forty-Seven-Bee, all such visitors must be greeted with appropriate ceremony — including, where budget allows, a banner reading *‘Welcome, Object of Uncertain Origin!’* in seventy-two-point sans-serif, preferably gold foil.

In the event of funding shortfalls, government shutdowns, or widespread existential malaise, employees are instructed to simply wave politely in the general direction of the object, file Form I-O-Three — *Guest Acknowledgment, Temporary* — and resume pretending that the universe is not continuously throwing debris at our solar system.

Failure to comply may result in reassignment to the Department of Lost and Asterisms, which is exactly as depressing as it sounds.

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You’re tuned into The Multiverse Employee Handbook.

Today, we’re exploring Three-Eye-Atlas — the third confirmed interstellar object ever discovered. A fragment of somewhere else. A wanderer between suns.

It slipped across the invisible border of our solar system without an invitation, older than our planets, faster than our comprehension, and still glowing faintly as it heads back into the dark.

But before we dive into what the James Webb Space Telescope and others are uncovering — its strange chemistry, its impossible orbit, and what it might whisper about distant planetary nurseries — gather ’round the antimatter kettle, dear non-Newtonian colleagues, for a tale of bureaucratic hospitality, limited budgets, and the tragic question of how one welcomes a guest who will never stay.

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In the fluorescent-lit realm of Quantum Improbability Solutions, specifically in the Department of Extrastellar Hospitality — which existed in a superposition of underfunded and deeply confused — the Square-Haired Boss was having what

could charitably be called a cosmic public-relations crisis.

It had started, as these things often do, with a memo from the Universe.

Not the poetic kind, of course — the Universe has dreadful handwriting. This was a literal object: an interstellar comet, now formally designated Three-Eye-Atlas, entering the solar system on a hyperbolic orbit that politely suggested it would not be staying for lunch.

To the scientists, this was thrilling — a chance to study matter older than our own Sun. To the Square-Haired Boss, it was a public relations opportunity with a measurable deliverable.

He immediately convened a task force. "We're going to welcome it," he said, adjusting his tie in the gravitational field of his own self-importance. "Let's show the galaxy that Quantum Improbability Solutions is open for interstellar business."

The Department of Extrastellar Hospitality responded as it always did: by forming a subcommittee, drafting a risk assessment, and ordering a banner that read "Welcome, Object of Uncertain Origin!"

Unfortunately, the company's budget had been frozen due to an ongoing government shutdown, and Procurement was in orbit around the concept of "later." The banner was replaced by a handwritten Post-it note taped to the break-room window, facing the wrong direction.

Meanwhile, Dave from Accounting was tasked with estimating the cost-benefit ratio of greeting a celestial body travelling at over fifty kilometres per second. After several spreadsheets, he concluded that it was technically impossible, but might still qualify for tax incentives under "uninvited guests."

Human Resources circulated a memo titled "Inclusive Practices for Non-Planetary Lifeforms," reminding staff not to assume the object's composition without spectroscopic consent.

The Safety Office insisted on installing bollards outside in case of "unplanned impact events." Legal responded that the universe's trajectory did not fall under corporate liability, except in the case of "acts of godlike indifference."

Through all this, the Square-Haired Boss remained determined. "This is our chance," he said, "to extend the hand of interplanetary friendship. Figuratively, of course. The real hand would need sterilising."

And so, at precisely two forty-seven on a Thursday, the staff of QIS assembled by

the office window for the official “Welcoming Ceremony.” The coffee machine hissed. Someone had brought biscuits, which was optimistic.

Above them — impossibly far above — Three-Eye-Atlas curved past the sun: an ancient fragment of another solar system, crusted with cosmic-ray scars and frozen volatiles from before Earth was even dust.

JWST, hundreds of thousands of kilometres away, was quietly collecting photons from its surface — light that had travelled for millennia, just to be measured, catalogued, and entered into a spreadsheet that Dave would later misfile under “guest expenses.”

The object did not respond. It did not slow. It did not so much as glimmer in their direction.

The Square-Haired Boss cleared his throat.

“Well,” he said, “perhaps it was shy.”

He raised his cup. “To our visitor — may its trajectory remain hyperbolic, and its data reproducible.”

And as they dispersed back to their desks, the office lights flickered, the stars carried on, and somewhere deep in the infinite darkness, a small, silent object slipped away forever — leaving behind nothing but a faint trail of dust, and a very confused purchase order.

And that brings us neatly to the science. Because unlike most guests, Three-Eye-Atlas didn’t leave a mess in the break room — just a trail of questions stretching across interstellar space.

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Three-Eye-Atlas is what astronomers call an interstellar object — a visitor from another star system, passing briefly through ours before vanishing forever.

It’s only the third one we’ve ever seen. The first was ‘Oumuamua, a cigar-shaped mystery that refused to behave like anything we’d ever observed. The second was Borisov, a proper comet with a respectable tail and no interest in conversation.

And now, this — a faint, icy drifter officially designated C/2025 N1 (ATLAS), discovered by the Asteroid Terrestrial-impact Last Alert System, which, frankly, deserves a raise.

What makes 3I/ATLAS special isn't just that it came from somewhere else — it's that it carries with it the chemical fingerprints of another solar system.

When JWST turned its golden eye toward it this summer, astronomers saw a spectrum — a kind of cosmic barcode — revealing traces of water ice, carbon dioxide, and the unmistakable weathering of cosmic-ray radiation accumulated over billions of years in the interstellar dark.

It's an archaeological artefact made of ice. A frozen paragraph in the autobiography of the galaxy.

And the trajectory? Hyperbolic.

Meaning: it will never return. Its path bends once around the Sun and then flings it back into the void, at tens of kilometres per second — a brief hello before eternal goodbye.

If you plotted that orbit on a graph, it wouldn't be an ellipse or a circle or anything remotely comforting. It would be a line that simply says, "Leaving."

Astronomers estimate it formed billions of years ago around another star — perhaps ejected by a passing giant planet, or a gravitational mishap during planet formation.

In other words: a clerical error of creation.

To a cosmic bureaucrat, it's a rounding error. To us, it's a once-in-a-civilisation opportunity.

When we return, we'll dive deeper into what this icy traveller can tell us about the architecture of other star systems, how JWST and ground observatories are piecing together its composition in real time, and why studying something that's already leaving may be the most human thing we've ever done.

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Welcome back, my non-linear colleagues.

When we left off, Quantum Improbability Solutions had just hosted the universe's least-attended party — a banner for a guest who never looked down.

But while the Square-Haired Boss wrestled with procurement policies and cosmic etiquette, astronomers were wrestling with something even more elusive: the

trajectory of 3I/ATLAS itself.

Because while the paperwork was metaphorical, the orbit most definitely wasn't.

Let's dive in.

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Astronomers don't just assume something's from another star — that would be unprofessional.

They prove it with math. Which, at its core, is how the universe writes its resignation letters.

3I/ATLAS was discovered in July 2025 by the ATLAS survey in Chile — a project designed, rather wonderfully, to spot things before they hit us.

But this one wasn't coming at us. It was sailing through the outer solar system on a trajectory so steeply curved that Newton himself would've put his apple down and said, "Oh, that's not local."

It's what's called a hyperbolic orbit — an open curve, not a loop. Unlike everything gravitationally bound to the Sun, 3I/ATLAS has a velocity greater than the solar system's escape speed.

Which means it's not just passing through our neighbourhood — it's moving house.

Its inbound path came roughly from the direction of Sagittarius — that's near the galactic centre — and its outbound leg will send it off toward the constellation of Perseus, though by the time it gets there, our species will probably have renamed both.

And unlike 'Oumuamua, which was frustratingly inert, 3I/ATLAS actually shows cometary activity — it's shedding gases and dust as it warms near the Sun, creating a coma and faint tail.

That's useful, scientifically speaking, because those gases let us analyse what it's made of.

It's also comforting. 'Oumuamua looked unsettlingly like a malfunctioning monolith; this one, at least, behaves like a rock that knows its job description.

From its brightness and dust production, astronomers estimate the nucleus could be a kilometre or two across, though the coma makes precise measurements

tricky.

It’s a bit like trying to weigh a snowball in a blizzard.

But here’s the remarkable part: based on its trajectory, speed, and inclination, scientists can say with statistical confidence that it’s not from our solar system.

It’s a true interstellar emissary — flung out of another planetary system long ago, probably during the violent adolescence of planet formation, when giant worlds kicked billions of icy leftovers into the void.

Most never meet anyone. This one did.

And for a brief moment in 2025, our telescopes caught a speck of someone else’s past — a time capsule adrift in the galactic tide.

If the universe had a lost-and-found, this would be it.

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Every photon that reaches us from 3I/ATLAS is a courier of improbable luck — a particle of light that left the Sun, bounced off an object older than our species, and came all the way back to land on a CCD sensor in Hawaii.

And somewhere behind that sensor sat an astronomer with too much coffee and just enough curiosity to notice that something didn’t quite fit the usual pattern.

That’s how 3I/ATLAS was discovered — not by miracle, but by vigilance.

The Asteroid Terrestrial-impact Last Alert System, or ATLAS, scans the skies every night for anything that looks like it might, statistically speaking, ruin someone’s weekend.

On the evening of July 3rd, 2025, its telescope in Chile picked up a faint, fast-moving smudge. At first it looked ordinary — a comet, perhaps, from the outer Solar System.

But when the orbital models came in, the numbers refused to close.

No amount of gravitational fiddling would make the thing loop back round the Sun.

The solution was elegantly horrifying: the object wasn’t bound to us at all.

It had come from interstellar space — one of the countless icy bodies flung out of

other planetary systems and now wandering the galaxy like lost luggage.

For centuries we've looked at the stars and imagined visitors — gods, angels, aliens, messengers. But in truth, the first confirmed interstellar visitors we've ever met have been… rocks.

Silent, ancient, entirely uninterested in our cultural output.

It's humbling, really. The universe sends us postcards, and we respond with press releases.
When JWST trained its infrared instruments on 3I/ATLAS, the data were almost poetic.

The spectra showed water ice and carbon dioxide, like the comets of our own Solar System — but with subtle shifts in the absorption bands, suggesting different isotope ratios.

In other words, the same ingredients, but mixed in a kitchen light-years away.

That's the beauty of interstellar objects: they're samples of other solar systems delivered to our doorstep.

Each one carries a chemical dialect — a record of the star it formed around, the temperature of its birth cloud, and the radiation it's endured on its long exile through the dark.

The surface of 3I/ATLAS isn't pristine; it's been cooked by cosmic rays for perhaps a billion years, creating a crust of complex organics that make it darker, redder, and more mysterious.

When sunlight hits that crust, it releases gases that we can analyse — little sighs of history escaping into the vacuum.

If the Department of Extrastellar Hospitality had any sense, they'd bottle that and label it "Eau de Genesis."

The implications, though, are enormous.

Each of these objects confirms that planetary systems everywhere are messy — that the making of worlds naturally involves the unmaking of others.

For every planet that forms, countless fragments are hurled into interstellar space, like cosmic shrapnel.

And because our Sun moves through the Milky Way at roughly two hundred kilometres per second, it's statistically inevitable that some of those fragments will occasionally drift across our path.

The odds are staggering but not zero: estimates suggest thousands of such interstellar objects pass through the outer Solar System every year — most far too faint to see.

Humanity has likely been sharing the sky with them since long before we invented the concept of sky.

Cave-dwellers may have looked up at a slightly brighter speck one night and thought nothing of it — an unnoticed emissary from another star.

Only recently have we become competent enough, or perhaps paranoid enough, to notice them.
Our telescopes have grown wider-eyed, our algorithms sharper.

We've entered what one astronomer called "the golden age of celestial trespassing detection."

But that raises an unsettling thought: if we've only just noticed three in recorded history, what have we already missed?

How many messages in the cosmic bottle have slipped past while we were arguing about budgets?
Future surveys may change that.

The Vera Rubin Observatory, when fully operational, will image the entire visible sky every few nights.

Its Legacy Survey of Space and Time will generate so much data that somewhere in its digital ocean, more interstellar visitors will reveal themselves — faint streaks of motion against the stellar wallpaper.

And when they do, we'll be ready: telescopes will pivot, spectrographs will hum, and a small chorus of scientists will stay up all night, muttering prayers to the gods of orbital mechanics.

There are even proposals to launch intercept missions — small spacecraft that could rendezvous with the next interstellar visitor, sampling its dust directly before it escapes forever.

Because as every planetary scientist knows, nothing says “welcome” quite like drilling into someone’s crust.

Yet beyond the data and the missions lies something more personal.

Every time one of these objects appears, we’re confronted with the oldest human question: Are we alone?

Not necessarily in the sense of biology, but in the sense of experience.

Are there other beings — intelligent or otherwise — watching interstellar visitors pass through their skies, wondering the same thing?

3I/ATLAS will never tell us.

It carries the chemistry of possibility, not the courtesy of explanation.

But its presence reminds us that the galaxy is porous — that material, momentum, and meaning drift endlessly between the stars.

In a way, we are all fragments of someone else’s solar system, thrown outward by forces we barely comprehend.

So when we point our telescopes upward, we’re not just hunting comets; we’re acknowledging kinship.
Each new discovery is a mirror held up to deep time, reflecting not our faces, but our capacity for curiosity.

We detect what we are capable of imagining.

And the better our instruments become, the larger our imagination must grow to match them.
That, ultimately, is the quiet revolution of 3I/ATLAS.

It’s not merely a visitor; it’s a calibration point — proof that the cosmos still contains surprises, and that surprise is a measurable variable.

In a universe dominated by thermodynamics, the most miraculous thing may be that we still bother to look.

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Well, my chronically curious colleagues, we’ve reached the end of another

quantum staff meeting with the cosmos.

Today we learned that 3I/ATLAS — our uninvited, unbothered interstellar visitor — reminded us that the galaxy is less a polite neighbourhood and more a constant debris exchange program.

That every star flings away fragments of its own making, and that sometimes — by pure celestial accident — one of them drifts close enough for us to notice.

We've also learned that, in the hierarchy of cosmic priorities, humanity ranks somewhere between a rounding error and a polite cough.

And yet, we still file the paperwork.

We hold meetings.

We bake cakes for things that will never attend.

Because that's what we do — we greet the infinite with a clipboard.

In the multiverse of hospitality and hubris, every welcome exists in a superposition of heartfelt sincerity and utter futility until the guest fails to show up.

Somewhere out there, 3I/ATLAS is already halfway to nowhere, its surface coated with radiation scars and the faint scent of bureaucratic optimism.

We measured its light, calculated its orbit, and wished it well — the cosmic equivalent of waving at a train that doesn't stop at our station.

Want to explore more quantum corporate chaos?

Visit us at multiverseemployeehandbook.com where you'll find the latest dispatches from the Department of Reasonably Impossible Events — including our new blog post, "Why Does The Interstellar Insist On Throwing Rocks At Us?"

And if you've enjoyed today's existential team-building exercise, share it with a fellow astronomically underfunded friend.

Spread our signal like photons through the galactic medium — or, failing that, like office gossip near the copier.

This is your quantum-coherent correspondent, reminding you that in the multiverse of cosmic visitors, we're all just temporary guests — trying our best to look professional while the universe quietly ignores the catering.

And according to the latest memo, the Square-Haired Boss has approved next year’s Interstellar Appreciation Day — pending confirmation of another visitor and a functioning government.