

A Fractalverse Novel

FRACTAL NOISE



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FRACTAL
NOISE

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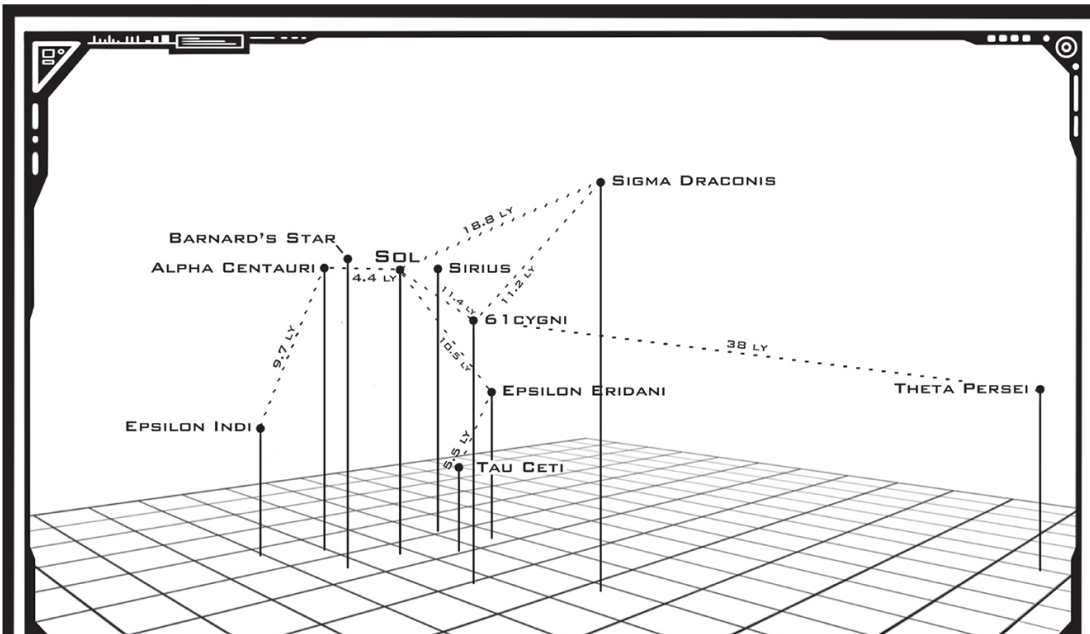
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AS ALWAYS, THIS IS FOR MY FAMILY.

*And also for those who have stared into the abyss during the small
hours of the night.*



A FRACTALVERSE NOVEL



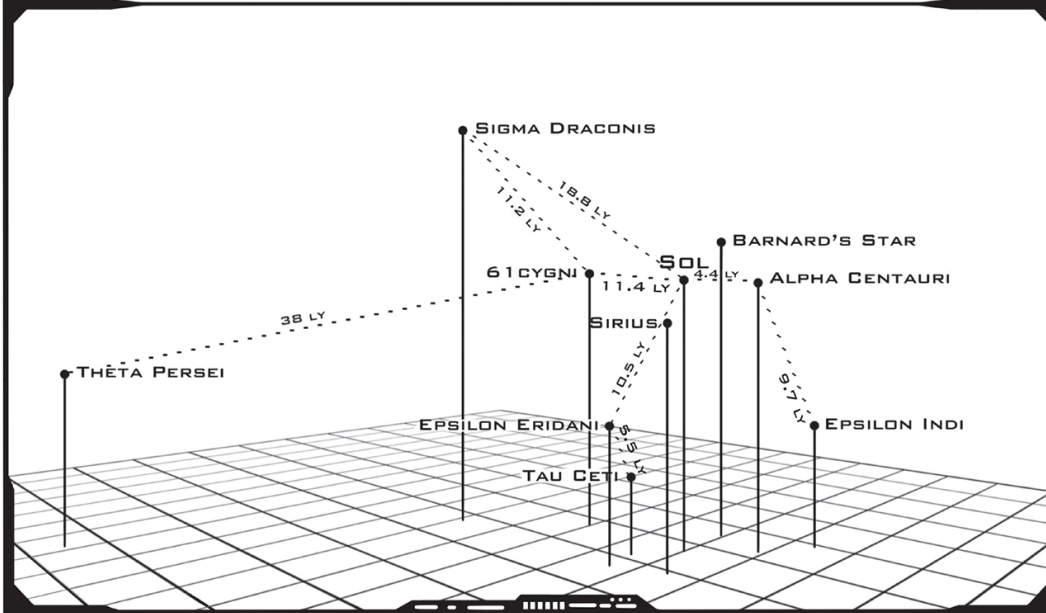
SOLAR ALLIANCE

NON-ALLIED

- SOL
 - EARTH
 - MARS
 - VENUS
 - MISC.
- ALPHA CENTAURI
 - STEWART'S WORLD

- 61 CYGNI
 - RUSLAN
- EPSILON ERIDANI
 - EIDOLON
- EPSILON INDI
 - WEYLAND
- SIGMA DRACONIS
 - ADRASTEIA

- TAU CETI
 - SHIN-ZAR
- THETA PERSEI
 - TALOS VII



APPREHENSION

'Tis a fearful thing

to love what death can touch.

—CHAIM STERN

CHAPTER I

PERSPECTIVE SHIFT

1.

On July 25, 2234, they discovered the anomaly.

It was ship-night inside the SLV *Adamura*, and all the lights were off or else dimmed and set to red to avoid disrupting the crew's circadian rhythm. The halls and rooms of the vessel were hushed ... but not silent. Life-support fans provided a constant background hum: lulling white noise that soon faded from notice.

Outside the *Adamura*, the sand-colored gas giant Samson receded into the black backdrop of space.

2.

The ship's lab was cramped. Equipment encroached from the walls, filled the center, leaving narrow walkways in between. Here it was warm from the computers, and the air had a thick, stifling quality. Numerous tiny indicators gave the impression of constellations scattered across the dark pieces of machinery.

Alex Crichton sat at the holo-display crammed into one corner, trying to read the results from the probe they'd dropped into Samson's atmosphere the previous day. Carbon, ammonia, methane ... The list blurred before his eyes. It was well past midnight. But he still hadn't written his report, and the captain was expecting it first thing in the morning.

The smart thing would have been to write the report that afternoon, when he was still somewhat alert. That would have been the smart thing. Alex knew it. But he hadn't been able to bring himself to type a single word. Like most days, he felt little to no motivation during waking hours. It wasn't much better at night: an occasional spurt of panic would result in a brief run of productivity, but even then, the work he produced wasn't very good. He was too sleep-deprived, and Alex didn't want to take a wake-me-up pill like StimWare. What was the point? To feel better? That wasn't going to happen. As long as he could keep Captain Idris from chewing him out again, he didn't care to do more. None of it really mattered, after all. Not to Alex.

The holo swam before him, numbers floating disconnected from their background.

Alex blinked. It didn't help. Frustrated, and not having the strength to deal with the frustration, he crossed his arms on the plastic desk and rested his head on them. A shock of black hair fell across his forehead, cutting off his vision.

How long had it been since he got it trimmed? Three months? Four? It had been sometime *before*. That much he was sure of.

He buried his face in the crook of his elbow, and for a long while, the hum of the fans was the only sound in the lab.

3.

Before.

Never had a word so haunted Alex. Before leaving Eidolon. Before signing up for the survey expedition. Before the funeral.

Before ...

It had been bright and sunny at the spare, A-frame remembrance center. The sort of bright and sunny that only occurred in nightmares. All their friends had attended the service, his and *hers*. Family too. That had been the worst of it. Her father with his heavy, shaggy head, murmuring advice and condolences that meant nothing to Alex. Her mother, a tiny, thin-boned woman who clung to his arm, weeping in such an effusive display, Alex found it actively off-putting. They both meant well, of course. How could they not? Their only daughter was dead, and there he was, a living link to the child they'd lost.

But he found their goodwill unbearable. Every moment of it had been a torment. He found himself staring past them at the pews of dark *yaccamé* wood; they seemed razor-edged in the clear, glass-like light streaming through the east-facing windows. Everything did, a world carved into being with the sharpest, most painful of instruments: grief.

At the front of the center was a bare concrete altar, and on the altar, the one thing he did not, *could* not, look at. The polished titanium urn he'd picked out three days earlier, barely paying attention while the funeral director guided him through a series of options. Like all the colonists who died on Eidolon, Layla had been cremated. Dust to dust, ashes to ashes.... Imagining the burner flames wrapping around her body caused Alex physical pain. It seemed obscene that her flesh had been subjected to such an ordeal, that her cells—still alive by most biological measures—should have been left to boil, wither, and char in the funeral home's ovens.

The Memorialist was an earnest, somber-faced woman who treated the proceedings with what seemed like appropriate gravitas. She spoke at length in a deliberate tone. None of what she said registered with Alex.

Afterward, the Memorialist brought him the urn. Her plain grey uniform was neat and clean, but she smelled of preservatives, as if *she'd* been embalmed. The scent nearly made Alex run.

He'd noticed the weight of the urn. It rested heavily in his hands, pulling him toward the floor, toward the ground and the end of all things. He didn't mind. A life should have weight. Old or young, it would have seemed wrong for a person's ashes to be too light.

Even when he accepted the urn, Alex still didn't look at it. Nor when he brought it back to the dome he and Layla had shared. Nor when he put it on the shelf at the back of her closet. Nor when—four weeks later—he packed his one bag, locked the pressure door, and left. The urn and the ashes it contained hadn't been *her*. They were something else, dull and inanimate, drained of color.

But even though he hadn't looked at it, Alex could still see the urn, could still see its polished curves, could *feel* it sitting at home with the weight of a truth that couldn't be denied.

And he hated it.

4.

A soft *beep* woke Alex.

He started and looked around, confused. The lab was as dark as before. Nothing had changed.

He scraped a crust of dried spittle from the corner of his mouth and checked his overlays: 0214. He should have been in bed hours ago. A message alert blinked in the corner of his overlays. He tapped it.

<Hey, come see me. You're not going to believe this. – Jonah>

Alex frowned. What was Jonah doing still up? The cartographer wasn't a night owl. No one on the survey team was, aside from Alex. And why ask to talk? The others didn't usually bother to interact with him, which was fine as far as Alex was concerned. Talking took too much energy.

For a long minute, he debated whether it was worth getting up. He didn't want to, but even in his exhausted state, he was tired of being alone, and a latent curiosity pricked him.

At last he pushed himself out of the tiny chair wedged in front of the desk. The muscles in his back protested as he stood, and his left knee throbbed; the old skiing

injury being its usual asshole self. For all the miracles of modern medicine, there were still some things that couldn't be fixed. The doctors claimed nothing was wrong with the joint. It just ... hurt. Like so much in life.

Alex took his mug of chell—now cold but still smelling of the spiced flavor—and made his way out of the dim, red-lit lab.

The main corridor was empty. His steps echoed off the grey metal, hollow and lonely, as if he were the only one left on the *Adamura*.

He didn't bother buzzing when he reached the survey station; he just hit the button next to the door, and it slid open with a loud clank.

Jonah looked over from his display. The light from the holo painted his gaunt face a sickly yellow. Faint wrinkles radiated from his eyes, like the deltas of dried-out rivers. They reminded Alex of the rivers of Eidolon. He wished they didn't.

"So you *are* up," said Jonah. His voice had a tense rasp. "Computer said you were."

"What about you?"

"Been busy. Couldn't sleep; doesn't matter. Come look. Got a whopper this time." His eyes gleamed with feverish intensity.

Alex sipped the chell as he went to stand by Jonah's shoulder. The tea stung his lips and mouth and left behind a warm glow.

Suspended in the display was an image of a flat, brown plain. Somewhere on the northern hemisphere of Talos VII, the second planet in the system, he guessed. A small dark spot lay like a drop of ink in the center of the otherwise empty landscape.

"That?" Alex asked. He pointed at the spot.

"That," Jonah confirmed. He reached into the image and spread his hands, enlarging until the spot filled the display.

A spike of adrenaline started to cut the haze in Alex's mind. "*Shit.*"

"Yeah."

The spot wasn't a spot. It was a hole. A perfectly circular hole.

The burning in Alex's eyes worsened as he stared. "Are you sure it's real? Could it be a shadow of some kind ... a trick of the light?"

Jonah grasped the edges of the hologram and turned it, showing the landscape from all sides. The black area was definitely a hole. "I spotted it right after dinner, but I had to wait to get pictures from a different angle to be a hundred percent."

"Could it be a sinkhole?"

Jonah snorted. "That big?"

"What's the scale?"

"Fifty kilometers from here to *here*." Jonah indicated points on opposite sides of the hole.

“*Shit!*”

“You said that already.”

For once, his tone didn’t irritate Alex. A hole. A *circular* hole. On an uninhabited planet located almost forty light-years from the nearest colony. At least, they thought it was uninhabited. All signs had indicated Talos VII was a dead, dry planet. Unless the life was buried. Or so different as to be unrecognizable.

His armpits grew damp.

“What did Sarah say?”

“Haven’t told her yet. Ship minds need their sleep too, you know.”

“Don’t regs state—”

“I’ll report it in the morning. No point in jumping the gun until I’ve got more data.” Jonah glanced between him and the display. “Couldn’t keep it to myself, though. Had to tell *someone*, and you’re our resident xenobiologist. So whaddya think?”

“I ... I don’t know.”

If the hole was an artificial structure, it would be the first concrete proof of intelligent, self-aware aliens. Oh, there had been rumors and hints, even going back before the Hutterite Expansion, but never anything substantial. Never anything obvious.

Alex swallowed as he stared into the center of the abyss. It was too large. Too perfectly symmetrical. Even with all the advances of the past few hundred years, he didn’t think humans could make a hole like that. They just didn’t have enough spare time or energy. And for what? Perfection implied seriousness of purpose, and there were only a few purposes that seemed likely: to pursue scientific research, to help fend off some existential threat, to fulfill a religious need, or to serve as a piece of art. The last two options were the most frightening. Any species that could afford to expend that amount of resources on what amounted to a nonessential project would be able to destroy every human settlement with ease, Earth included.

Perfection, then, was a warning to heed.

Vertigo unbalanced him as Jonah tilted the image. Alex clutched the edge of the display to steady himself and reassure himself he was still standing in the *Adamura*.

The hole terrified him. And yet he couldn’t stop looking at it. “Why didn’t we notice it sooner?”

“Too far away, and Yesha and I didn’t have the time. We’ve been swamped mapping all the moons around Samson.”

“Are you *sure* it’s not a sinkhole?”

“Impossible. The curve of the edge varies by less than half a meter. Won’t know the exact amount until we’re closer and we can get a better scan, but it’s not natural,

I can tell you that much.”

“How deep is it?”

“Again, can’t tell. Not yet. Deep. Might be kilometers.”

The sweat under Alex’s arms increased. “Kilometers.”

“Yeah ... If this is what it looks like—”

“Whatever the hell that is.”

Jonah persisted. “If this is what it looks like, we’re talking about one of the most important discoveries in history. Right up there with FTL. Hell, even if it *is* just a big hole, we’ll still get mentioned in every journal from here to Earth.”

“Mmh.”

“What? Don’t think so?”

“No, it’s just ... If that was built, then where the fuck are the ones who built it?”

5.

Alex sat on the bunk in his cabin, staring at his hands. With a sense of dread, he opened the drawer by his pillow and pulled out the holocube.

He hadn’t looked at it for almost two weeks, the longest stretch so far. He might have made it another few days if not for Jonah’s discovery ... if not for the impossible hole.

But now Alex had to see *her*. Even though he knew it would hurt. Even though he knew it would leave him worse off than before. He felt like an addict craving a fix; just one more hit, yes please. Stick the needle into the wound, dig deep into the ache, and let the fire fill his veins. He hated himself for it, and yet he couldn’t stop.

The ghost of Layla’s face looked out at him from within the cube. As always, it was her expression that struck him: a bright, flirty look, as if she were teasing him. Which she had been when he’d taken the picture. They’d gone on a hike behind their dome, out along the perimeter fence. The sun had been warm, the glitterbugs loud and sparkly—gemlike chips of color darting through the air—and her smile ... oh, her smile. When she turned it on him, he’d felt the luckiest, handsomest man in the galaxy, and she the kindest, most beautiful woman. Truthfully, neither of them were, but he’d felt it, and the feeling had been enough.

I should have gone with her. I should have— He tried to ignore the thought, but it refused to leave: an evil mantra repeating on an endless loop.

He twisted the cube between his hands, forcing the points and edges into his palms, as if to split the skin. The pain was its own form of relief.

His head dropped lower. Again he could feel the weight of the urn dragging him down.

Sometimes the universe decided to rip apart your life and stomp on the pieces, and there wasn't a damn thing you could do about it except say, "Now what?"

He'd been asking himself that a lot over the past four months, ever since the accident. How was he supposed to move on? How was he supposed to act as if there weren't a giant gaping chasm inside him where everything he'd considered solid and dependable had crumbled away? How was he supposed to pretend to be normal again?

Alex didn't know. Often he wondered what would happen if he just *stopped*. Who would give a shit? Not his parents, that was for damn sure. They hadn't shown the slightest interest in his life after he left Stewart's World. He doubted that his death would be any different. As far as they were concerned, he was already gone. Out of sight, out of mind. They were practical like that.

Two weeks after the memorial at the remembrance center, his in-laws had insisted on taking him to church. Even under normal circumstances, he would have found it a strange experience; he'd never so much as stepped inside a place of worship—much less one as official as a church—before meeting Layla, and it wasn't something he'd gotten used to, despite her dragging him along for services every holiday (he'd drawn the line at regular Sunday attendance, not that work would have allowed for such frequency).

The church belonged to the Reform Hutterites, and the preacher was one of those relics with wrinkles and a beard who insisted on abstaining from STEM shots out of a belief that aging naturally brought you closer to God. He'd gone on about the usual Hutterite topics, which meant a lot of talk about sparseness and spareness and the benefits of self-denial.

It hadn't been what Alex needed to hear. If God existed, Alex figured he wasn't much for self-denial. No sir. If anything, God seemed to be a malicious prankster determined to make Jobs of them all.

He'd gone straight home after the service and signed up for the next available expedition. Anything to take him away from Eidolon and the hopes, dreams, and memories cremated there.

Leaving hadn't helped. No matter how hard he focused, no matter how many hours he pulled, the chasm still yawned inside him. And at the bottom of it was a gibbering, mindless version of himself. It wouldn't take much to push him into that darkness; he felt as if he were already halfway down the slope. Mostly though, he just felt tired. Exhausted.

The presence of an alien artifact on Talos did nothing to change that.

It scared him, of course. How could it not? But he felt no great desire to study the hole. His curiosity was a wet ember, guttering and smoking, fading to ash. Even

before, he'd never been motivated by lofty ideals. He wasn't the sort to dream about discovering sentient aliens or of somehow learning deep secrets of the universe by examining strange new forms of life. Xenobiology was a job for him and little more. He enjoyed the puzzle-solving aspect of the work, but for the most part, it was just a means to pay the bills. And that had been enough.

Only now ... it wasn't. Nothing was. Not work, and certainly not the hole. Were it up to him, he would take a few more readings and then leave. Let the folks who cared study the hole. He just wanted to stop thinking and feeling. Somehow. *Anyhow*.

Layla would have cared. All of the high-minded concepts that eluded him—and that he so often looked down upon as unrealistic and impractical—had lived within her. She spent hours talking about the possibility of finding intelligent life, about the philosophy of exploration, and what it would mean for humanity to finally know that they weren't alone. She'd burned with the power of her passion, and he'd admired her for it, even if he never really understood. Oh, he could explain her beliefs in a rational, intellectual way, but he didn't *feel* them the way she did, which made it hard for him to embrace the positions she held. Most of the time that hadn't caused conflict between them, but when it did ...

He pressed his lips together, and his breathing grew ragged.

The holo shimmered as he tilted the cube from side to side.

“Aliens,” he whispered. “Sentient aliens.”

The news would have delighted her ... no, more than delighted—*transformed* her. The hole was everything she'd dreamed about finding. He could see how she would have smiled with excitement, and he knew there was nothing he or anyone else could have done to stop her from studying the structure.

Her smile ... Tears filled his eyes. He wrapped both hands around the holocube, gripping it as hard as he could, and bent over, feeling the emptiness in the world where she ought to have been.

He fell asleep still holding the cube and tears drying on his cheeks. His last conscious thought was her name:

Layla ...