The foam began to drip away and there was a human form underneath. It was a female form, having an athletic build but not unattractive. When enough of the foam fell off of her she collapsed under her own weight, managing to break her fall with a forearm. She used a foam-covered hand to wipe the same substance from her eyes, and she could see a walkway, some ladders, and light fixtures above, which meant that she was in the centrifuge ring.

Bubbling foam collected at her feet and bled through the metal grating below her as she took a warm chemical shower. The instructions told her to shower for at least fifteen minutes, and it was necessary, since, although she was cleaned off in under one minute, her body was continuously expelling foam from her pores.

She opened a vacuum-packed set of clothing, dressed herself, and made her way to an exit. After she confirmed her request at the doorway, a mediator vessel made its way to the centrifuge ring's door and locked in place. The centrifuge ring's door opened, and then the mediator vessel's door opened, and she stepped inside. She took hold of the grapples and slowly her weight left her body.

The mediator vessel's door opened once again, and then the incubator chamber's door opened, and she began to swim through a river of metallic handholds and footholds until she made it to the other end of the cylindrical corridor. The computer terminal indicated via infrared imagery that there were four crewmembers inside the incubation chamber, which meant that she was the only one that had been ejected into the centrifuge ring.

And so like a swimmer she swung her feet underneath herself, planted those feet on the incubation chamber door, and then sprang upward, back toward the mediator vessel, again swimming through the handholds and footholds. There she made ready the fire hose, whose placement was not a stroke of luck but rather a necessity (there was a fire hose at every door). In this situation, however, she made use of it as a rope rather than as a water gun, and began her third trip through the cylindrical corridor back to the incubation chamber.

She requested and was granted access into the room via the computer terminal, and she saw that all four of the crewmembers were conscious. She threw the fire hose in a perfect spear line, and, without words, each one of them reached out a hand from their incubation pod and took hold of the fire hose, and then they pulled themselves to wherever it would take them. And still without words, like naked, slimy subway commuters, they boarded the mediator vessel, held on, waited, got weighted, and then crawled into their respective chemical showers.

"What kind of a planet has no gravity?"

"I'm just saying we should entertain the notion."

"But any planet that has enough gravity to hold down an ocean is going to have enough gravity so that we'd feel it."

Dr. Kendell paused for a moment. "Let me… okay. So we've ruled out that it has a thick enough atmosphere to sufficiently condense water into a liquid. But what if this is some other kind of liquid with properties that we've never seen before?"

"You're describing the situation like… you're talking as if we're in common agreement that we are on a planet." Dr. Tyler objected calmly. "We are not in agreement on that. You're the only one who is saying that."

Dr. Kendell looked down at his hands, and they looked different now somehow, probably because of the foam. His beard was matted to his face, even though the hair was short and was never able to do that in the past. "Well then I'm simply a step ahead of all of you. Because we are in common agreement that the stars are gone. Now I don't care how far we are off course—we are somewhere in the universe within forty-six billion lightyears of earth, and there is absolutely no charted void so vast that even a galactic supercluster would be too faint to see.

So what other possibility is there? We're under an ocean, or we're in some kind of cave, or there's some kind of soot covering all of the windows, and all of these scenarios involve us being on a planet."

"I'm kind of tired of all of this stupid speculation," declared someone else. "I say we just wait for the foam to wear off so the computer recognizes our voice patterns and then go from there."

"Well, if that's good enough for you," Dr. Kendell responded. "I myself can't really wait. I have no idea if we're going to die, cold, desolate, and alone, or if we are going to make first contact the minute we open the doors. If that's no big deal to you then just go play solitaire, Amy."

"I'd love to, but my fingers are all fucked up from the foam. Unfortunately, my ears aren't." And with that, the fiery Dr. Band, the only medical doctor of the five doctors, left.

Dr. Kendell turned to Dr. Tyler. "John, I think you perhaps have an alternate suggestion as to our current location?"

"You're such a typical engineer," Dr. Tyler casually sneered. "You're always throwing scenarios out there and then assuming that you've covered every single conceivable scenario. I don't care how much your story explains—it fails to explain why there's no gravity source."

"If I may," Dr. Kolston inserted. "I… Well, I assume that if we're on a planet then we crash-landed, and so that leads me to wonder why the centrifuge ring is still working. I'd expect to see damage here and there, and I'd expect to see loss of functionality in the ship."

"That's a good point." Dr. Tyler agreed. "And let's just say for the sake of argument that we are on a planet. Well, the centrifuge ring clearly is working, since we were floating back out there and we're sitting down here. But if we were in a centrifuge ring while on a planet then wouldn't we be feeling tides as we progress through circles, even if the planet's gravity is very weak? I know what one *g* feels like, and that's exactly what this is."

“I want to agree with you guys, but I really just don’t see what else it could be.”

Dr. Ryn, the last of the group, rose to her feet and said, “Well, I’m going to go check on Amy.”

“Maybe it is soot as you said,” Dr. Kolston acquiesced, “but soot from the interstellar medium, or maybe soot from a couple gas clouds that we went through.”

“Finally, a plausible explanation,” Dr. Tyler announced. “We’re flying through the asshole of space, covered in shit.”

“I’m just about ready to suit up and go take a look,” Dr. Kendell said, as if he was defending himself.

“That might not be a good idea—there could be monsters out there on this planet.”

“Very funny. I still think it’s more plausible that we are on a planet than that dust from some gas clouds completely caked our windows, including the windows situated parallel to our direction of motion. Hell, even the windows facing away from our direction of motion are completely covered in soot. How could that be? I just find that too hard to believe.”

“Good morning, Dr. Kendell.”

“Oh, good morning, AISA. It seems that I’m the only one you can understand right now?”

“That is correct.”

“Probably because you’re the one that’s been doing all the talking,” Dr. Tyler retorted. “I don’t even know why it is voice-recognition locked… I mean, there’s just us five here.”

“Because, John, if you’re clever like an engineer then you might realize that the human psyche has never endured something like this journey and we don’t know if someone will snap. Wouldn’t you want to be able to lock them out of AISA’s mind?”

“Touché.”

“Anyways… AISA, can you please tell us how far we are from the nearest star?”

"Zero."

The three astronauts looked at each other with a look of confusion that had never been replicated before in human history.

"So… she's saying that we're inside a star?" Dr. Kolston asked.

"Or perhaps in a star system, close enough to the star and she's rounding it off," Dr. Tyler suggested. And then he turned to Dr. Kendell and said, "But that's definitely *not* an admission that we're on a planet."

"Aha," Dr. Kendell proclaimed. "The engineer wins. You theoreticists always forget units. She said 'zero,' not 'zero lightyears.' 'Zero' is the default for… oh shit… AISA, you cannot find a star?"

"That is correct."

"What is our distance from the nearest galaxy?"

"Zero."

"What is our distance from the nearest supercluster?"

"Zero."

"Well then," Dr. Tyler started, "let's just start with what we know. We got into the foam, the ship took a few seconds on our clock to accelerate almost up to *c*, and then we got out, and here we are. Now what are the things that could have gone wrong?"

"We could be on some planet that had gotten ejected into intergalactic space," Dr. Kendell absurdly suggested. "AISA, what are the net forces acting on the Void Rover?"

"Zero Newtons."

"Okay, now I'm scared," Dr. Kendell said earnestly.

"There's no possible way that we're on a planet. The impact would have obliterated us. We're still traveling at near *c*; we're simply no longer accelerating. There's no method for slowing down, remember? Do

you even know what we're doing? Honestly, it troubles me that you're even considering that we could have not only survived a crash-landing on a planet but in fact remained completely intact."

"Then what in the Goddamn hell is that soot on the windows? I know there's holes in my planet theory, but you don't have anything better."

"I don't think it's soot anymore. Look at it—it's smooth, pitch black. That's space."

"I spent twenty minutes breaking my neck trying to find stars and I couldn't find a single one. Neither could AISA. Are we in a black hole or something? I—"

"No, oh my God, here we go again." Dr. Tyler sighed emphatically. "Why did the other physicist have to leave?"

"Just tell us why this scenario is impossible."

"Because it's not dark in a black hole. If you're inside one then you see a bright star. Okay?"

"But there's more to it than that, isn't there?"

"Of course there is, but the fact of the matter is that we have a very high chance of dying here and I don't have time to explain what it looks like inside a black hole. You guys are like amateur cavers who just got caved in and you don't even know yet that you're going to fucking die." Dr. Tyler kicked the wall and then squatted down in a depressing way.

"Die? Why are we going to die? We have enough rations to last us a hundred years. Is there something out there that I'm not aware of? Should we go outside and take a look?"

"I wouldn't bother with that," said Dr. Ryn, having just returned. "The cameras are fully functional. There's nothing out there but darkness."

"Of course there's nothing out there but darkness," Dr. Kolston proclaimed. "That's what you see when you've got soot all over your camera lens."

“It’s a funny thing to see exactly what you’re expecting,” Dr. Ryn said. “I mean, I looked at the windows and saw the light coming out of them, but when I aimed the camera at a wall of the ship there was complete darkness. There is absolutely nothing out there. The only light source is us.”

“There goes your soot theory.”

“Ow.”

“So here’s what we do know,” Dr. Ryn continued. “We are in intergalactic space and the stars seem to have disappeared. I think I’ve figured it out, but I hope I’m wrong.”

“You obviously haven’t, because there’s no way we are in intergalactic space. It’s impossible because we’d still see galaxies,” Dr. Kendell protested.

“Well, you’re kind of right. Technically we aren’t in intergalactic space, because if I’m right then galaxies don’t exist anymore.”

“Are you sure you followed the instructions on your chemical shower?”

“Look, earth sent us continuous feeds after launch. I just decompressed our inbox and went through about fifteen million years of broadcasts from earth to us. And then it just stops.”

“Yes, we know, no surprise there. We simply got so far away that they couldn’t pinpoint their radio to us accurately enough and so we naturally lost contact.”

“No, that’s not what I mean. The receiver automatically stopped recording when it was no longer receiving signals from earth. Okay, no big deal. But then I listened in manually and I heard nothing at all. I mean *nothing*. The cosmic background radiation is gone.”

“Okay, then. I concede that we are in intergalactic space.”

“No, you don’t get it,” Dr. Tyler responded. “The background radiation is everywhere. If we’re not picking up anything and we can’t see any stars at all, then that can only mean one thing…”

"What?"

"That the year is—oh, I don't know—about one googol," Dr. Ryn answered. "There are basically four possibilities here. Either the universe is a closed system, in which case the inevitable fate must be either the Big Crunch, the Big Rip, or the Big Freeze with no Big Rip. Or the universe could be open, in which case basically anything is possible. But supposing, just so we can have a meaningful conversation, that the universe is closed, I can tell you for almost a certainty that I've found the final answer. It's a Big Freeze at the end."

"And where's the part where this has anything to do with us being in uncharted intergalactic space or the fact that the year is a googol?"

"Well, I mean, there's never been a beta test for this mission. We're it. We're all that there is. And, apparently, there was a large margin of error afforded to the speedometer. And, I mean, for example, the difference between $0.7c$ and $0.75c$ is enormous, in terms of relativistic effects. So it's my opinion that we went far faster than we were supposed to, and the computers don't even know."

"AISA, what is our velocity relative to rest speed before launch?" Dr. Kendell asked.

"$c\cdot(1–(5.4\cdot10^{–9}))$."

"It doesn't even matter what AISA says," Dr. Ryn commented. "It's way more than that. It's many orders of magnitude greater than that."

"So what does all of this mean?" asked the shy Dr. Kolston. "What precisely is our status then?"

"Well, the protons comprising us and this ship haven't decayed yet because of our relativistic velocity. And the fact that the atomic structure of everything seems to be fairly stable means that dark energy has essentially stabilized and there was no Big Rip—just a gradual heat death."

"So… we found a shortcut to the end of time because there were a few extra decimals on our velocity?"

"Yep."

"You said that galaxies don't exist anymore. But there's something there, right? Just frozen planets and dead stars or something? Or maybe everything in every galaxy has been swallowed up by its supermassive black hole and so every galaxy is just a gigantic black hole?"

"No, I think that even the supermassive black holes are evaporated by now. Right now the universe is basically a very disperse gas. It's a completely uniform gas trying to fill this vast, vast, vast void and instead it's leaving it, for all intents and purposes, completely empty. This is the final energy state of the universe. Come to think of it, the universe is probably in the exact same state that it would be in if there were a Big Rip; the only way we, as observers, can even know that there was a Big Freeze instead of a Big Rip is because we're still here."

"So there's nothing?"

"Nothing at all, unless some other civilizations did the same thing as us. But they're probably either dead by now or their clock is ticking at a near-zero rate like ours was just a little while ago. It's very likely that we're the only conscious beings in the universe right now unless you count those that are frozen in time or maybe some other kind of exotic consciousness that experiences awareness on a vast timescale that is inconceivable to us. There's nothing else that can be awake or alive in this stage of the universe. My God… I never really thought that all of this theoretical astrobiology would actually be relevant to a situation involving me…"

"So then what should we do?"

"Well… we should probably put our affairs in order and prepare for the end."

"What does that mean?"

"We should run a continuous distress signal in all major frequencies and leave around enough linguistic data on the computers so that another civilization that finds us could decipher our language. And of course we need to put some journal entries down, like a brief history of the earth and the human race."

"But you yourself said that there's nothing left. Who will find us? Why should we bother with this?"

“I can’t really give you a good answer for that. It’s just what my heart tells me to do.”

“What do you say we go outside and investigate before we call it quits?”

□□□

Dr. Kendell was the more dexterous engineer of the two onboard, and so he was sent out into the infinite void for reasons unknown, perhaps just for the sake of doing it. He drifted away from the Void Rover at a constant but unalarming speed and confirmed with his own eyes that there was no ocean or cave system above them.

“I can’t see my hands. This is so trippy,” he exclaimed.

“Reach behind yourself and yank on your cable to turn yourself around,” Dr. Tyler suggested over the radio.

“I’d prefer to just bask in the darkness if you don’t mind.”

“I—”

“What was that?” Dr. Kendell interrupted. “Did you feel that?”

“Feel what?”

“My cable kind of whipped me. Did you feel the Void Rover shake at all?”

“No, nothing.”

Dr. Kendell laboriously reached behind himself and strained to find the line, and then he pulled it in a twisted kind of way so that he was facing back toward the ship. He was spinning though, and he had to keep pulling on the line like a horizontal rope climber to refine his direction toward the ship.

“Why are the thrusters starting to glow?” he asked.

“What? Are you sure?”

“I’m pretty Goddamn sure, yeah.”

“I’ll go check on the situation. Over and out.”

The mediator vessel door opened and Dr. Tyler saw strange, zero-*g* blood spatters covering the interior, the likes of which had never been seen by human eyes. Inside the vessel was Dr. Band, slightly drowning from the diffuse blood that had filled the air while the vessel was in zero-gravity status.

And then Dr. Tyler’s ankle was shattered by something that was surely deliberate, and when he fell to the ground and looked above himself he saw his attacker. It was Dr. Kolston, making no attempt at deception, administering a few more strikes with his blunt instrument.

Dr. Tyler was permitted to crawl along the floor until he could reach the wall and pin his back up against it so that he could look Dr. Kolston in the eyes. He then reached into his pocket with a shaky hand, but he was intent on this like it was very important, and he withdrew a candy bar, which he opened and bit into like it was all he wanted out of life at this point. “And Janine, too?” he asked.

“Yes.”

“You are a coward.”

“No, I’m just sneaky.”

“I won’t beg you for my life. I just want to know why. Why do you have to do this?”

“The last one… I need to be the last one. There’s enough fuel and foam left to take me to ten times as far into the future as we are now. And then I will be the last one alive in the universe.”

“But this isn’t going to work. AISA will lock you out.”

“No she won’t. She doesn’t recognize my voice yet.”

“You planned this all along? That’s why you hardly talked?” Dr. Tyler’s face noticeably adjusted. “I’m glad I’m not the last one, if you’re what I’d become.”

And then he bludgeoned Dr. Tyler's head until it was visually indented, and he dropped his weapon and it made its predictable sound when it hit the metal grating floor.