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A Complete Novel

THE MULTILLIONTH CHANCE

By JOHN RUSSELL FEARN

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Read Our Companion Science Fiction Magazine—STARTLING STORIES



"Ylleen, swerve westward!" Farrel warned her desperately

NEVER THE TWAIN SHALL MEET

By **BRETT STERLING**

Out in space John Farrel keeps his tryst with Ylleen, gorgeous Martian girl whose love means—sudden death!

JOHN FARREL felt the same chill apprehension as his officers and men, but he couldn't show it.

It was a fine thing to be a space-ship captain—back on Earth. It was fine to walk out of New York Spaceport and have people glance with admiration and respect at your uniform and silver bars.

But it wasn't so good to wear those silver

bars when you were fifty million miles from Earth, with your crippled ship drifting into a big meteor-swarm, and your men looking at you in mute, scared appeal.

Captain Farrel braced his lanky figure and tried to keep a look of confidence on his dark, tired face as he spoke.

"The *Thetis* has been hit bad, men. But it's not hopeless. We'll still reach Ganymede

if we can fix up those smashed jets."

"Fix them up with what?" demanded Gorley, the first mate. The big red-headed Irishman, always either in the clouds or the depths, had dejection all over his battered face. "We've already used our spare jet-tubes and we've not enough refractory alloy to make more."

"We've got our lives, all ten of us, and enough oxygen for a couple of weeks," Farrel pointed out. "So we still have a chance."

He walked across the turbine-room, in which they had gathered after the stray meteor tore away the jet-tubes and part of the stern. He pointed through a window at the star-flecked void ahead.

"That meteor-swarm we're drifting toward—we may find the refractory metals we need there. Lots of meteors assay high in such metals."

A faint hope lighted their faces as they gazed. Then Binetti, the thin young navigator, suddenly yelled and pointed.

"Look at that!"

Captain Farrel swung back to the window in time to glimpse it. It was a sudden flare of light in space ahead of them.

It burst forth deep inside the vast, loose meteor-swarm, but it wasn't the red-hot glow of two ordinary meteors colliding. This was a blinding explosion of pure light, gone in an instant.

Farrel knew instantly what it meant, and what it meant to them. But for a moment, he couldn't speak.

It was Kells, the stocky second mate, who cried hoarsely:

"Good heavens, some of the meteors in this swarm are Negative!"

"Negative?" Gorley stared, then sat down and crossed himself. "Then that is *that*."

It was death-sentence, that blinding flash ahead. It was death-sentence for any ship that ventured amid Negative meteors.

Some of the crew-men looked stunned, bewildered. Kells was still staring from the window, his lips moving numbly. Binetti cursed softly with Latin fluency and passion.

FARREL felt the same impact of cold, ultimate despair. But he couldn't surrender to it. The bars on his sleeve wouldn't let him.

"So because some of this swarm is Negative, we just lie down and die?" he rasped. "Shall I open the airlock and get it over with?"

Gorley shook his red head heavily.

"It's no use, sir. We could maybe buck everything else, but you can't buck Negative matter."

The same despair was on all their faces, Farrel saw. The despair and dread which all space-men felt toward Negative matter.

It had been so since the first space-ships had taken off from Earth, forty years before. Had been so, since some of those ships had tried to land on Venus and Mars and had vanished in flares of energy.

That was the ghastly way in which men had first learned that Venus and Mars were Negative. Saturn was too, and Neptune also, it was believed. Only Mercury, Earth, Jupiter and Uranus, and their satellites, were Positive.

Farrel had often thought that the stunning discovery should have been foreseen. For the possibility of Negative matter had been realized by scientists since the discovery of the positron, back in 1932.

All matter consisted of atoms which had electrons revolving around a central proton. In Positive matter, ordinary Earthly matter, the proton had a positive charge and the electrons had negative charges. It had been blandly assumed that the matter of the whole universe was like that.

But Anderson's discovery of the positron in 1932 had cast first doubts on that assumption. For the positron was an electron, but it had a positive charge. Then in 1945 the Russian scientists, on their mountain-top, had trapped strange protons that drifted in from space, protons that had a negative charge.

Negative protons, positive electrons—these together formed matter exactly the reverse of ordinary earthly matter. They formed Negative matter. And when Negative and Positive matter came into contact, their opposing charges caused them to explode into a burst of photons, into pure energy.

Such an energy-explosion had happened when a Positive ship from Earth had first tried to land on the Negative world of Mars. It was what had happened in the swarm ahead when a Positive and Negative meteor had touched. It was what would happen to the *Thetis* and all in it, if and when it touched a Negative meteor in that devil's swarm.

Captain Farrel forced himself to speak evenly.

"Our chances are a lot worse than we thought. But they're not gone entirely."

He gestured ahead. "We may drift inside that loose swarm for days without touching a

Negative fragment. We can still escape, if in that time we can find a Positive meteor with the refractory metals we need."

Gorley's mercurial spirits did a rebound. "At that, we've a chance if our luck holds out," he cried. "We'll just pray that no Negative meteor crosses our path."

Kells grinned mirthlessly. "Praying is about all we can do, until the *Thetis* drifts to a nice, convenient Positive meteor of metals."

Binetti's black eyes lighted hopefully. "Shall I start running the spectroscanner on the nearest stuff in that swarm, sir?"

Farrel breathed less tightly as he saw that habit and discipline were regaining their hold.

"Yes, and meanwhile we'll get the space-suits ready to use," he suggested. "Kells, have the power-crews check their turbines."

The *Thetis* drifted on and on. It didn't seem to be drifting, in the following hours. It seemed to be standing still, hanging in the middle of the vast and solemn vault of watching stars.

But the radar screen showed they were moving into the outer fringes of the vast, loose swarm of debris. The swarm itself showed to the eye merely as a great, tenuous maze of creeping crumbs of light.

Binetti, sweating at his instruments in the nav-room, looked up doubtfully at Farrel.

"There are indications of Positive meteors with the metals we need, sir. But the whole swarm is rotten with Negative."

Farrel nodded.

"It would be," he said. "This debris between Mars and Jupiter is all rubbish left over from the formation of the planets."

The Sun had fathered all the planets, Positive and Negative alike. It was believed that the Sun consisted largely of neutrons or neutral protons, and that these were transmuted gradually into Positive and Negative atoms whose mutual destruction yielded the energy of the solar orb.

LONG ago, in bursts of creation whose strange periodicity was still a riddle, the Sun had thrown off alternate masses of the two different kinds of matter it created. And those masses had formed the planets, planets forever divided into two opposite kinds of worlds.

Farrel looked back from the nav-room at the red spark of Mars and the more distant white speck of Venus, almost lost in the Sun glare.

"Worlds we'll never be able to visit," he thought. "We've done a lot in forty years, colonizing Jupiter's moons and reaching out now to Uranus, but we'll never see those worlds."

Weariness increasingly drugged his brain. It seemed to Farrel suddenly that he had always been tired like this, since boyhood.

Toiling night and day to get his technical education, working his brain to the limit at Space Academy, sweating his way up to a Captain's bars—and all for what? To die here now, in this faraway void?

Farrel had no illusions. Their chances were a hundred to one. Ten years ago, he'd have thought such a death glorious. But a man of thirty couldn't think like one of twenty.

Binetti's cry, an hour later, jerked Farrel out of his tired doze.

"There's another ship drifting in this swarm!"

"Another ship?" echoed Farrel, astounded. "Here, give me that scanner—"

"It's just north of us in the swarm," Binetti said excitedly.

Space-men had divided the equatorial plane into four arbitrary quadrants. North, east, south, west, zenith and nadir were the arbitrary directions of space. Farrel peered tautly northward now.

"By Heaven, there is!" he muttered. "A ship drifting near us here in the swarm. No jet-flares showing. It must be crippled, like us."

Within an hour, the men of the *Thetis* could see the other ship with unaided eyes. It was drifting powerless in the vast, rotating swarm of meteoric debris, as they were drifting.

But it looked different from their own standard, torpedo-shaped craft. This other vessel was oddly foreshortened, glinting in the thin starshine like an elongated metal egg.

"It's no ordinary Jupiter-run ship," said Gorley in puzzled tones. "Must be one of the new experimental ships they're always trying out."

"Their hull looks intact," Kells remarked. "It must have been turbine failure that brought them in here."

Excited relief soared in Farrel.

"But their jet-tubes look okay! This is our chance! We can surely fix up one of our two ships and get away!"

The other men quickly realized that. Faces brightened, taut lips relaxed, light came back into their eyes.

Farrel gave quick orders. "Kells, you and

I will go across in space-suits and find out if anyone's living on that craft. We'll have to get a line between ships soon, before the drift separates us."

He and the second mate were soon attired in the heavy suits and transparent helmets. In the airlock they tested their space-phones, oxygenators and hand-rocket impellers, and then leaped out into space.

Pointing their impellers backward, they used the little rocket jets to hurl them toward that other drifting ship, a quarter-mile away.

Awesome, floating forward here in the infinite abyss! Farrel had done it before but he would never get used to it. And his skin crawled at the thought of the Negative matter in the swarm around them.

Kells' voice came excitedly on the space-phone.

"That ship's not dead, sir! There are people coming out from it!"

Farrel's pulse jumped as he saw that three figures had leaped out from the oval ship and were coming by impeller to meet them.

"They must have sighted our ship just as we saw theirs," Kells was saying. "Now we can surely make repairs and get away."

"If a Negative meteor doesn't hit us first," warned Farrel.

Kells was shooting eagerly ahead to meet the oncoming three figures. Farrel, following, saw that the space-suits of these three were as unusual as their experimental ship. Not only their helmets but their whole suits seemed to be of transparent plastic.

"Why, one of the two in back is a girl!" came Kells' surprised exclamation from ahead. "Captain, I—"

At that moment, Kells' suited figure met the man leading the three strangers. They clasped gloved hands to avoid drifting past each other.

A blinding flare of energy exploded where Kells and the other man had just touched! And as that flare died, the two men were gone.

"Stars in heaven!" choked Farrel. "Those people—they're Negative!"

THE hideous unexpectedness of it stunned his brain, left him floating numbly. Floating right toward the remaining two strangers!

He glimpsed them clearly, inside their transparent suits. They were white-skinned people like himself. One was a young man.

The other person, the nearest, was a dark-haired girl whose wide, horrified green eyes

met his gaze. Was she shouting to him?

Farrel couldn't see any space-phone mike inside her helmet. These people didn't seem to have space-phones at all.

Yet he heard something! Not with his ears. He heard it dimly in his mind, a thought and not a voice. A warning thought!

"Keep—away—death—if—touch—"

Warning thoughts inside his brain? Had he gone crazy?

"Farrel, use your impeller! Get back!" came Gorley's voice in frantic warning from the ship, over his space-phone.

That real, familiar voice snapped Farrel out of his daze enough to make him shift his impeller. Its flaming jet checked his drift.

The girl had similarly checked herself. She and the man floated a dozen yards away from Farrel, staring wildly at him.

Farrel saw her more clearly now, the broad, low forehead, the wide, stunned green eyes, the parted red lips, and the rounded limbs hardly concealed by the short tunic she wore inside her transparent suit.

He forced speech from a dry throat. "Good grief! What are you people? You can't be human."

The girl saw him speaking. She shook her head. She couldn't hear him. He remembered that she had no space-phone in her helmet.

"But how do they talk to each other in space without phones?" Farrel wondered dazedly.

"Not talk—thought—brain waves—amplified—"

Again, those sudden thoughts rushed through his mind. Thoughts that were not his.

Dimly, he remembered something. The encephalic brain-waves discovered back in 1929 by Berger, those minute electric oscillations of the brain—could it be that they were used somehow for communication?

"For talk, yes! We use—apparatus that—amplifies our brain-waves and broadcasts them at short range. Mechanical telepathy."

He was hearing those thoughts much more clearly now, as the girl came a little closer! Mechanical telepathy, thought-pulsations electrically amplified and broadcast to every nearby brain!

He had learned a little to catch her quick mental messages.

"You have no amplifier, but at close range I can faintly receive your thought," she was telling him. "You are—receiving mine?"

"Yes," he started to say, but the girl made a quick gesture.

"Think your answer. Think it with all your mind, as you speak it!"

Farrel tried to do that as he spoke hoarsely.

"You people—your ship—you're really Negative? Living people of Negative matter?" Her mental answer echoed in his mind.

"And you are of the other kind of matter? But it is incredible! No one has ever dreamed of that."

That went double, Farrel thought numbly. No one in his own world had seriously thought that there might be people who were Negative.

Yet why not? There were whole Negative worlds, Mars, Venus and others. Why shouldn't life have risen on them, the same as on Earth? Negative matter was just as good for that purpose as Positive!

His brain reeled. He tried to think concentratedly as he asked:

"Who are you? What world are you from?"

"I am Yleen," was the girl's replying thought, as nearly as he could grasp it. "And I come from the red planet yonder."

Her arm gestured toward the far red spark of Mars.

"Our ship was returning home from the sixth planet when its turbines failed. We drifted into this swarm. We have been working to repair them."

Yleen? A girl from the Negative world of Mars, a Negative girl talking to him here by amplified thought-waves? It all seemed impossible.

Two wholly different peoples co-existing in the Solar System without knowing of each other until this chance encounter in space? Two peoples infinitely separated by their basic difference in matter?

He had to admit its possibility. Neither folk had been able to visit the other's worlds, so had not even suspected the other's existence till—

"Farrel! Behind you!"

That sharp, warning cry in his ears came suddenly from the distant *Thetis* in Gorley's voice.

At the same moment, Yleen and the man with her pointed behind him in frantic warning.

Farrel twisted his neck and glimpsed the jagged, thirty-foot ball of stone riding ponderously through the swarm toward them.

"Quick!" came Yleen's flashing thought.

"Use your impellers!"

FARREL'S impeller hurled him zenithward and Yleen shot up in the same direction. But the Negative man near her misjudged direction.

"Bran, upward!" Yleen's frantic amplified thought directed at the other Martian impinged on Farrel's brain. "You're heading wrong!"

Bran, the Negative man, saw his mistake and tried to dodge clear with his impeller but was a shade too late.

The edge of the jagged mass brushed his space-suit. There was a blinding explosion of light. The Negative man and a segment of the meteor vanished in it, and then the great stone mass thundered on.

Yleen's thought came agonized with grief. "It was a Positive meteor and it grazed him!"

"Yleen, swerve westward!" Farrel shouted, thinking the warning urgently as he did so. "There's drift behind that meteor!"

A little cloud of fragments, of meteor-debris, was flowing toward them like a loose cataract of stone in the wake of the giant.

Positive or Negative? Whichever that drift might be, it would be death to one of them, Farrel knew. He and the Negative girl were perilously close together as their impellers hurled them hastily away.

The loose river of stone fragments flowed past behind them, following the gravitational suck of the big meteor. Wandering fragments that strayed near Farrel made his flesh creep, for they might be Negative.

Finally, he and the Negative girl paused a little apart from each other in space.

"This is a devil's nest of danger," Farrel warned. "We'd better each get back to our own ships before we get hit."

"Our ship is almost repaired," came Yleen's thought. "Is there any way we can help you?"

Farrel made a gesture of helplessness.

"No way. You can't give us spare jet-tubes or anything else, for you and all your stuff are Negative. But thanks for the offer."

He looked around, but neither ship was now in sight. There was nothing but the great starry void, alive with moving crumbs of light.

"Gorley!" he called into his space-phone. "Get a direction fix on me and tell me which way to come!"

There was no answer, though he called repeatedly. A chill came over Farrel as he realized what it meant.

"I can't reach my people with my short range space-phone. We went further than I thought, dodging that drift."

"Nor can I reach my people!" Ylleen exclaimed. "Our telepathic amplifiers are also built only for short-range work."

Floating there a little apart, they looked at each other in simultaneous dismay.

"We are lost!" the girl said. "We've no idea where our ships are."

Lost? Farrel felt the disastrous shock of it. Lost here in a swarm that was laden with Negative matter, and with his only companion a girl whom he couldn't even touch without annihilating them both!

He realized now, too late, what had happened. The meteor-swarm was a loose, swirling net that rotated in currents of varying speed. The complicated currents had swept them apart from the ships, and their own impellers had quickly widened the distance.

Farrel desperately tried to determine direction by the position of the Sun and inner planets.

"The ships must be drifting somewhere in that direction," he said finally, pointing. "They can't be too far away from us yet."

"And they must still be fairly near each other, so we will go together," Ylleen said.

They triggered their impellers and started rocketing in that direction, at a respectful distance from each other.

Glancing at the Negative girl as they hurtled on, Farrel felt growing admiration. Her lovely face was unafraid. She asked him his name.

Her thought repeated it oddly, as a sound like "Far-ul."

"I wish there were some way our people and worlds could know each other," he told her.

"Far-ul, so do I. Perhaps some day they can. Our scientists have been trying to convert Negative to Positive matter by first attaining an intermediate neutral stage. But they have not yet succeeded."

"It is only out here in empty space that we two could ever have met like this, without destroying each other," she added.

"Yes," thought Farrel. "Positive is Positive, and Negative is Negative—

—and never the twain shall meet,

Till Earth and sky stand presently

At God's great Judgment-Seat."

"You quote one of your poets?" Ylleen's thought asked. "But it is true. For isn't this

vastness of space like a mighty Judgment-Seat?"

They hurtled on and on, frequently twisting their heads to watch for the death that was never far from them in the whirling swarm.

Over another flowing cataract of stone fragments, rocketing hastily upward to avoid the gravitational suck of a ten-mile planetoid, they pressed steadily in the direction on which Farrel had fixed.

Cold conviction of error crept upon him after an hour. For they were still within the swarm, but saw nothing of the two ships.

"We'd better swerve eastward," he said, worried by his discovery. "We've got to compensate for the faster current as well as our own deviation."

"Far-ul, do you think we shall find the ships before our oxygen and impeller-charges give out?" Ylleen's thought questioned.

Her face, and the tone of her telepathic question, were calm and without a trace of hysteria.

FARREL'S heart warmed to her. He wished he'd met a girl like her in his own world, years ago. He mightn't have had such a lonely life.

"You've oxygen for a couple of hours yet?" he asked anxiously. "So have I. We'll surely find them before that runs out. The ships will certainly try to signal us."

The worst of it was, he thought, that no ordinary beacon signal would be visible in this great swarm of sparks. And they were completely out of space-phone range.

As they steadily worked their dangerous way on through the swarm, he asked Ylleen eager questions about her world of Mars.

Her telepathed descriptions built in Farrel's mind a picture of moon-drenched red deserts, of little fairy cities of pink plastic, of a girl who had longed to be a technician and help in conquering space.

"Your Earth is not like that, Far-ul?" she asked.

"No, though we too have deserts," he said. "But there are great green oceans too, and blue skies and snowy mountains and great plains."

He found himself talking about his own life, something he had never done before to any girl.

Ylleen's green eyes were understanding. "I think you have been very lonely, Far-ul."

"I've had my job to do the same as you,

the job of helping open up the other Positive worlds," Farrell said.

"We two are much alike," Yleen said. "Far-ul, I am glad that we met!"

"And I!" he exclaimed impulsively. "Yleen, I wish you were a girl of my own world."

She smiled at him a little sadly.

"Would it make much difference now, when the end for us may be near?"

"Don't say that," he begged her. "We'll get out of this yet. We're nearing the outer fringe of the swarm and must see the ships soon."

They had to use their impellers constantly to dart aside from onrushing planetoids or gleaming showers of fragments. Each of them watched a hemisphere of the void for danger as they worked forward.

Farrell's weariness increased. He saw Yleen's face white and strained inside her helmet, but she flashed her brave smile when she saw him looking.

Impelling himself too violently away from an oblong stone mass of which Yleen had given warning, Farrell found himself only a foot away from her.

"Far-ul, back!" she cried, using her own impeller to recoil from him. She added shakily then, "If you had touched me—it would have been awful!"

He knew, with an icy sensation along his spine, what that would have meant. Instant annihilation, for both of them.

His oxygen-tank needle was dropping steadily back toward zero. The blasts of his impeller seemed a little weaker, too.

They hurtled up to avoid a loose cluster of football-sized rocks, then hovered over it and looked ahead in appalled dismay.

They had come almost to the outer fringe of the swarm. And neither of the two ships was in sight anywhere in the starry vault!

"Yleen, I've led you in the wrong direction," Farrell said, in bitter self-reproach. "I've thrown away your chances."

"We shared the same risk," she told him steadily. "It's not your fault."

They floated, hovering over the cluster of rocks without attempting further search. For both knew that time was running out now.

Yleen looked at him.

"If I must die, I am glad that it is this way," she said. "I am not afraid, with you."

He saw in her face, across a dozen yards of space, what he had never seen in any woman's face in all his lonely years. And he felt

a warm, bursting emotion released in him.

"Yleen, listen!" he said huskily. "It's madness to say this. But I never loved any girl in my life, and I love you!"

Her soft green eyes shone with a wonderful gladness. "Far-ul, is it true? For I know that I love you. From the first, I have been wishing that we might have been of the same world, of the same kind."

Wistful longing quivered in her white face. "If we could have had but a little time together—if we could only have touched hands, even! But we can't, we can't! All that we can do together is to die."

BLIND waves of heartbreak rose in Farrell as he realized the tragic trap that fate had set for him.

To meet at last this girl he loved, and to be doomed never even to touch her! To meet here in the solemn vault of space in a death-trap from which they could not escape—it was so hopeless!

"Yleen, you have got to escape!" Farrell exclaimed fiercely. "I'm not going to let you die."

A desperate expedient had flashed across his mind. "Tell me, if we could signal your ship would it be able to come for you?"

"I think so," the Negative girl said wonderingly. "Its turbine-repairs should be completed by now. But how can we signal?"

He pointed down at the cluster of rocks below them, over which they were drifting.

"Some of those little meteorites must be Positive, and some Negative. You can handle the Negative ones, and I the others. If we hurl two meteorites of opposing kinds together, the flash they make will be visible a long way through the swarm. And a series of such flashes—"

Yleen instantly understood. "But my ship, my people, would not be able to help you, Far-ul!"

Farrell lied quickly. "My own ship should be repaired too, by now. They too will see and come."

Yleen did not flinch at the prospect of entering the loose, drifting cluster below. But she asked:

"How can we tell which meteors are Negative and which are Positive?"

Farrell had foreseen that necessity.

"Use your impeller-blast on each one as you approach it, Yleen. The atomic particles from your blast are Negative—if they start a sudden flare, the meteor is Positive."

He used the same system of detection himself, when they had gingerly moved down into the cluster.

Here, danger was close all around them. They were drifting with the cluster and its stones seemed merely to be floating around them, but a touch of the wrong kind of meteor meant destruction.

Farrel turned his own impeller-blast on the nearest meteor.

It flared dazzlingly, a rind of its surface vanishing.

He backed hastily away, knowing it was Negative. He tried another. The blast merely fused the surface of this stone a little. Farrel quickly advanced and seized it.

Yleen had already grasped a Negative meteor a little larger than his. They could not throw them, floating free as they were. So, at Farrel's direction, they rocketed toward each other with the stones, then at the last moment released the two little meteors and curved away.

The two meteors met and a soundless burst of brilliance exploded in the void, instantly vanishing.

"Now another!" sweated Farrel. "If they only see one flash, they'll think it merely a natural collision."

Again, and then again, they ventured down into the cluster for opposing meteors and hurled them together to cause brilliant flashes.

The fourth time, Yleen's thought came to him in warning.

"Far-ul, I can do little more. My oxygen will soon be gone."

"If I could only give you some of mine!" he answered agonized.

He couldn't give her any. That was the bitterest torment of all. His oxygen, like everything else about him, would be instant death for her.

Her eyes clung to his across the little space that separated them.

"I am not afraid. Not even now, so long as you are here!"

And then, out of the maze of swarming sparks, a red flare of rocket-jets and an on-rushing, oval black bulk loomed toward them.

"It's your ship!" Farrel cried out eagerly. "They've seen, and have come for you!"

"But your ship has not come!" exclaimed the Negative girl, fear in her voice.

"It will come soon," lied Farrel. "Quick, be ready to get aboard."

"I will not leave you here to die alone!" flamed Yleen.

A wonderful, yearning emotion flooded Farrel's heart as they looked at each other while the Negative ship loomed closer.

"There's nothing you can do. Your ship, your people, can't help me. You must go, Yleen."

"No, there's still a chance!" she insisted. "My people will know where your ship lies in the swarm, Far-ul! Wait!"

HE KNEW that she was directing her thought at the oncoming vessel whose brake-jets were now slowing it to a stop. He could vaguely sense the swift, amplified telepathic question and answer.

"They do know where your craft lies, Far-ul!" she told him. "They say your friends have found a Positive meteor with the metals that they need, and are repairing your vessel. We can lead you there—"

"No," he told her quietly. "My impeller is almost exhausted, Yleen. And I can't use yours."

"Far-ul, listen! Gravitation operates the same with Positive as with Negative matter. You can't touch our ship—but its gravitational suck can tow you through the swarm to your own vessel, if you can keep from contact with us."

It was a wild, hairbreadth chance that was offering itself, Farrel well knew. But he seized on it.

"It could be done. And it's the only way. Tell them to try it, Yleen."

The big Negative vessel had come to a halt near them, its airlock door open and waiting. The gravitational pull of the big mass was such that Farrel had to use his weakening impeller to keep from floating toward it.

Yleen went into the ship and then came back out into the airlock near which Farrel was floating.

"I have replenished my oxygen and I have told them what they must do," she said tensely. "They will start gently."

Even that gentle start almost shook Farrel free of the Negative ship's pull. From the airlock, Yleen's space-suited figure watched, stiff with anxiety for him.

Slowly, cautiously, the oval ship moved through the swarm. Held in its gravitational suck, Farrel found himself circling the moving vessel like a tiny, erratic satellite.

His impeller's blast was fast dwindling, as he used it to keep from a deadly contact.

Twisting, squirming, frantically firing his feeble little blasts, he was dragged on with the Negative ship.

It seemed eternities, to Farrel. But at last the oval craft groped its way above a meteor-stream and into view of a long, torpedo-shaped ship to which was lashed a big, jagged meteor.

"The *Thetis*!" Farrel cried. "Gorley, can you hear me?"

The mate's voice came in a shout on his space-*phone*. "Mother of Heaven! It's the Captain come back! Get our airlock open!"

The Negative ship had again slowed to a drift. From its open airlock, Yleen came toward Farrel. She came so close that he could clearly see her white, strained face.

"Yleen, we're safe," he said huskily. "But this has to be goodbye."

Her thought was quivering. "Must it be goodbye for always?"

"It must," he said heavily. "We can never visit each other's worlds. But—I'll never love anyone else, Yleen!"

"Far-ul, listen!" she cried. "We can at least meet here again in space. Will you meet me here, an Earth-year from now?"

Farrel answered eagerly. "I will! We can meet above this swarm, by radar rendezvous. I'll be here!"

He saw that her face was wet with tears as she turned and impelled herself into the airlock of her ship.

In a few minutes, Farley was inside the *Thetis*. Gorley and Binetti unscrewed his helmet and ripped off his suit.

"How did you get back?" the stupefied mate demanded. "And did you know that we've got enough refractory metals out of that big meteor outside to forge new jet-tubes? And—"

Farrel didn't listen. He was looking out of the window at the Negative ship, as it blasted on its way out of the great swarm.

It was on its way home to Mars, to the planet he could never visit. And Yleen was going with it. But he seemed to hear still in his mind a fading telepathic cry.

"An Earth-year from now, Far-ul! I will be here!"

* * * * *

On Ganymede's busy spaceport, Gorley tried a last vain expostulation as Farrel walked toward his waiting space-speedster.

"In the year since we had that adventure in the swarm, I thought you'd have recovered your reason!" he stormed. "You can't keep

that crazy rendezvous!"

"Yleen will be there," Farrel said steadily. "And I am going to meet her."

GORLEY swore. "It was only the excitement and danger and all that made you think you were in love with her. And even if you two do love each other, what good will it do you to meet? You can't even touch her."

"Just to see her again will be enough," Farrel told him. "I'm going, Red."

His speedster took off with a rush and all the long hours and days that he flew through space it seemed to him that his heart was calling him homeward.

When he finally brought his little craft above that vast swarm of debris, he saw instantly the other little ship that showed on his radar screen. He was soon as near it as he could safely go, and hurrying into his space-suit.

Out from that other little ship to meet him came another space-suited figure. On it came, until they were but a few yards apart.

"Yleen!" he cried, his voice throbbing. "I knew you would come."

For a time, they looked at each other. And Yleen's face was pale and strange.

"Far-ul, I came because I do not want to be separated from you again, ever."

"But we can't be together!" he protested, torturedly. "Not in this life!"

"Would you risk death if we could come together?" she asked him tensely.

"Of course I would!" he exclaimed. "But how?"

She interrupted by rocketing toward him. And her thought reached him like a sobbing cry.

"Then come, Far-ul!"

He could not understand. If they touched, they would vanish together in a blaze of force and light.

But a deep impulsion, a perfect trust, sent Farrel hurtling to meet her. Better to face death than to go back to the old loneliness and forget the only girl he had ever loved!

He saw her white face inside the helmet, as they rushed toward each other. Their outstretched hands met!

And nothing happened!

They were drifting together there in space, arms locked around each other, and nothing had happened at all!

Farrel's brain reeled. "Yleen—what does it mean? You're not Negative, now?"

"No, I am like you now!" came her mental cry. "And we can be really together, Far-ul."

She told him eagerly, "I told you that the scientists of my world had been trying to convert Negative into Positive matter by first attaining an intermediate neutral stage. It was hoped their experiments were near success. That's why I asked you to meet me here."

"I don't understand!" Farrel marveled. "How could they make Negative matter into Positive?"

"By first making it neutral," she reminded. "They worked in a laboratory in free space, handling matter by magnetic tractor-beams. They found a way to bombard a piece of Negative matter with streams of neutrons so that a neutron replaced each negative proton in that bit of matter."

Farrel could dimly understand that.

"A neutron will displace a proton in a nucleus, yes," he said. "But since it has no charge, it couldn't hold the positive electrons and they'd instantly rush free."

"And when that happens, the neutron-nuclei instantly emit negative electrons!" she exclaimed.

"Of course!" Farrel cried. "And when a neutron emits a negative electron, it instantly itself becomes a positive proton! Positive protons and negative electrons—it would be Positive matter then!"

"It was not quite as simple as that," Yleen corrected. "Free negative electrons had to be jetted into the matter at the same instant

to complete the structure of its atoms. But the whole process was almost instantaneous, starting automatically when triggered by the neutron bombardment."

Farrel was staggered by the colossal nature of that achievement of Martian science.

"And they did that to *you*, Yleen?"

"I offered myself as the first living subject for their process," she said simply. "In their laboratory in free space, they converted me and my little ship into Positive matter."

"But why didn't you tell me at first?" he cried.

Her eyes clung to his face.

"Far-ul, the whole process was theoretically perfect but there *might* be an error. I couldn't let you risk facing death with me unless you were willing."

The risk that she too had taken, the perfect willingness with which she'd accepted perpetual exile from her own world, rushed over him.

He held her more closely, even their space-suits not lessening the wonder of actually having her in his arms.

"Yleen! Yleen!"

She told him, presently, "It means that by that process of conversion, men of our worlds can visit each other in future. The two civilizations can grow together. Perhaps, even, whole worlds can be converted."

He could not think of that future of many worlds. Moving with her toward his ship, his arms locked about her, he could only think of the future that would be theirs alone.

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