

## Gamow Quadrant

A small cluster of stars on the edge of the Ziri nebula, this is a sleepy developing area of the galaxy. There's one main habitable agricultural world (Bertex) and a few with terraforming potential but most of the territory is either focused on mining or research (presence of 2 protostars and one fairly large supermassive star). There's a very sparse Imperium Galactic Fleet presence so most of the development is done by non-official small corporate co-ops with limited resources.

<i>System</i>	<i>Age, Mass</i>
<b>Bertex</b>	2.0b years old, 0.88 solar mass This system is mostly fields of asteroids but there's one Goldilocks planet sized satellite (0.75 Earth size) with 90% surface ocean cover, also called Bertex. When discovered the planet's atmosphere was mostly CO2 but terraforming has given it just enough oxygen to sustain humans - breathable as long as you don't exert yourself, and the rich CO2 makes the planet ideal for agriculture. The planet has a temp score of 5 (temperate but with large ice caps), a population score of 6 (~2 million people) and a representative democracy government. Its spaceport is an Imperium Scout Service way station - lots of room for ships to land, and reasonable repair facilities but no docks for new hull construction. This planet serves as the administrative capital in the quadrant.
<b>Bool</b>	1.6b years old, main sequence red dwarf 0.62 solar mass Under other circumstances this star might be classified as nearly orange but it's the smaller partner in a binary system and for roughly the last 400k years its mass has been slowly accreting into the larger Mehktar. The transfer has been accelerating and has about 300k years before its entirely consumed. Because of the gas/dust stream there's very little real estate that you could land a ship on and no real prospects to build any sort of base.
<b>Fantu</b>	3.2b years old, a main sequence star with 1.2 solar mass This is a mostly-mature planetary system with a Goldilocks zone Earth sized planet (Faantu-Hak) still in the process of being terraformed to address a high level of toxins in the atmosphere. The ETA for the planet to become habitable is still in the 40-50 year time frame so this system only has a modest amount of cargo traffic related to the terraforming process. There's a decent sized domed base on the planet that could hold 10k people but usually has less than 1k at this point.
<b>Gixl</b>	1.9b years, main sequence 1.4 solar mass This is a relatively mature developing system that has one Earth-sized world that unfortunately has a class 12 (insidious) atmosphere making terraforming impossible. A small ice ball planetoid called Gixl-Deeni has a tiny domed research post with room and life support for 100 people but there are no active projects in the system so it's basically a backwater with few visitors except miners and couriers.
<b>Gries</b>	500k years old, main sequence currently with 6.9 solar masses but expected to grow to 9 This is a marginally interesting system without any habitable planets fully formed so it isn't safe to establish a regular base, but it does have an outer asteroid that hosts a ramshackle domed pirate/smuggler base with about 300 population most of whom are employed in a cracking plant used to distill starship fuel.
<b>Hep Klez A</b>	1.1b years old, main sequence 1.9 solar mass The first of a chain of stars condensing at this edge of the quadrant, it has one modest sized planet with a very thin atmosphere. A small (1k capacity) domed

colony exists but doesn't serve much purpose other than as a pit stop for people doing something else (usually investment pitches to visitors who might fund terraforming). The main plus is that the planet is reasonably warm but so far nobody has begun the very costly process of terraforming (probably 100m CR for a planet that wouldn't necessarily be that useful).

### **Hep Klez B remnant**

This cloud is the remnant of a mysterious explosion. Prior to the explosion the star was roughly 6 solar masses and should have novaed into a red giant after 4b years. There isn't much left though the remaining dust and gas cloud might recondense into a smaller star given enough time (at least 5b years). The site holds some scientific interest because Imperium researchers still want to know what happened so it gets occasional visits to study the cloud - still no good theories have come forward.

### **Hep Klez C**

A still forming protostar that may actually begin fusion any day now, currently 0.98 solar mass This system is scientifically interesting but with no economic prospects either now or in the near future.

### **Jaari**

600k years old, main sequence 5.7 solar masses expected to accrete more material up to 10 masses

A young medium-large star that surprisingly already has a Mars-sized arid planet with a thin atmosphere that currently isn't breathable but may be worth terraforming since this is an ideal location to support surveying and mining.

### **Kruud**

2.1b years old, main sequence 3.0 solar masses

This has a complex planetary system with unfortunately no Goldilocks planets but it does have 2 habitable moons (A and D) both of which orbit a gas giant called Belvar. Belvar D is larger and wetter and will eventually be much better for agriculture, but Belvar A at about twice the size of Mercury has much less gravity making it easier to get into and out of. Belvar D is interesting to W&O since it's the most likely place in the quadrant for their crystals to have formed, but it's complicated because about 50 years ago an eccentric hunting enthusiast seeded the planet with plant life and a wide variety of animals including some pretty large dinosaurs.

### **Kyt**

2.4b years old, main sequence 2.1 solar mass

This is a mature system with a size 7 planet (just smaller than Earth) in a Goldilocks zone with a decent class 7 atmosphere and a decent amount of water (class 6) but which is unfortunately in the middle of a snowball climate phase. With a modest investment (30m CR) this is expected to eventually turn into a very rich agriculture planet but so far there aren't any plans to begin that work.

### **Mehktar**

1.4b years old, main sequence binary 1.3 solar mass

This is a developing system whose planetary formation has been severely limited by the fact that every scrap of rock and gas orbiting the star gets swept through the accretion trail of gases being pulled from its binary partner Bool. Mehktar got a slightly later start than Bool but it was positioned to basically tear Bool apart. The consumption of the final shreds of Bool is expected to be a very high energy event lasting for thousands of years so the fact that there isn't really a planet to build anything on is probably a good thing. There are a few places in the system where a ship could land, but there's nowhere that's safe to set up for more than a few months stay so this is a place scientists visit for short trips to monitor and regularly replace/repair automated sensors.

**Pilitz**

250k years old, main sequence currently 81 solar masses

This is an already very large star sitting in the edge of a gas nebula that's feeding it even more mass as time goes on. It's estimated to have maybe another 100k years of life in the course of which it could reach 100 solar masses and until then it's considered highly dangerous given the frequent release of flares of X-rays and neutrons. There are 3 asteroids that have been used as research bases over the last 50 years but they were all threatened by conditions and currently they're all deserted. Like other scientific points of interest in the quadrant this is a place that Imperium researchers visit briefly and then quickly move away.

**Riggs**

6.6 billion years old, bottom end of main sequence with 0.19 solar mass

This system is comparatively ancient for this quadrant, more than twice as old as even the oldest of the current generation of stars, Riggs formed in the distant past. A tiny red dwarf that's only barely a star, it actually has a small barren planet with a very advanced navigation assistance station operated by the Galactic Fleet's Scout Service. A multi-domed base hosts the quadrant's main subspace relay and rescue service. If anyone in the quadrant sends out a distress signal this is the place whose job it is to listen and respond, and the personnel that perform that duty are probably the smartest most professional people in the whole quadrant. In addition the base has facilities for a wide variety of repairs of practically everything that can go wrong with a starship. If at all possible any technical work to be done in the quadrant ought to be done here because this base has the most availability of spare parts and technicians with the expertise to string them together.

**Shoru**

Protostar, 4.6 solar masses

A forming protostar expected to begin fusion in the fairly near future, though it may take a few thousand years before it's fully confirmed. The current size estimate for this star is 4.6 masses but like the other young stars in the quadrant it's still growing because of matter flowing in from the Ziri nebula. Ultimately Shoru may push 20 solar masses. The space around the protostar core is very dark so there's an active danger of colliding with rock and clouds of caustic dust, but that danger also makes this system a place where fugitives sometimes hide when they're worried that the pirate base at Gries isn't safe enough. As a result it's fairly common to find the occasional wreck left by people who tried to hide here. The risks make this a desperate hiding place of last resort so it's arguably a place where you don't want to find anybody because if they're hiding here then they're seriously nuts.