

Mini-article 1: Deciphering the Symbolic “Alphabet” in Interstellar Objects Used by the Incoming Fermi Life-Form

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B_{ackground}

The *zoo hypothesis* solution to the Fermi paradox posits that advanced life-forms are monitoring us without intervening. This solution to the famous paradox implies that the advanced lifeform would know precisely when we become capable of detecting interstellar objects. If the zoo-hypothesis indeed is the solution to Fermi’s paradox, this should enable the advanced interstellar life-form to determine exactly when to begin using interstellar objects for communication purposes. That is, *if* they wanted to send clear and robust information from them, to us. This is because interstellar objects carrying information can have no other source than an intelligent life-form existing outside our solar system. It would therefore be a perfect way to communicate from outside our solar system to life on Earth, by removing all doubt as to where the signals have an alien origin, or not.

The recent [2024](#) and [2025](#) papers in the article series on “The Fourth Law of Thermodynamics” assume that the advanced life-forms [Enrico Fermi](#) referred to in the 1950s have been monitoring all other life-forms in the universe, including us, constantly searching for zero-risk signals. The Approach Theory from the 2024 article assigns this advanced life-form the name “Fermi lifeform,” based on the logic of the Paradise Machine Model and the Approach Theory

itself. According to the theory, this life-form would have emerged from earlier evolutionary processes in this universe, as Enrico envisioned, likely billions of years before us. Furthermore, the question of “why we have not yet seen them?”, as Enrico Fermi famously asked his colleagues in the 1950s — has generated two major branches of explanation for his paradox: (1) the Great Filter theory and (2) the zoo hypothesis. The 2024 article suggests that the incoming advanced life form has responded to a universal zero-risk signal emitted from Earth around 2005, triggering the very advanced civilization Enrico Fermi foresaw to approach the source of that signal.

In conclusion, the Approach Theory, in combination with the Paradise Machine Model, therefore suggests that the most natural name for this incoming life-form is the “Fermi lifeform.” Its origin and behaviour appear to be exactly what Enrico Fermi and the scientific community later correctly foresaw: that this advanced lifeform origin was similar to ours, only billions of years earlier somewhere in the universe, and that the reason we have not yet met them is the zoo hypothesis.

According to the 2024 and 2025 papers the Fermi life-form does not observe all other life-forms in the universe in a traditional “zoo scenario.” Instead, it constantly monitors all life-forms in the universe via the quantum world in order to detect and respond to stress signals indicating that zero-risk strategies in the struggle-for-survival game have been achieved. According to the *Paradise Machine Model* (Figure 1) and the basics of the Fourth Law, the Fermi lifeform would interpret such a signal as *evil intent without any risk* having been achieved somewhere in the universe, thereby being a direct threat to their “paradise state” of 100% love and intelligence.

Recent developments following 3I/ATLAS further supports support the idea that the incoming Fermi lifeform uses interstellar objects to communicate.

The Approach Theory suggests that the incoming Fermi lifeform is now capable of influencing physical objects in relation to Earth, as its overall influence should steadily increase after having approached our planet since 2005 (Figure 1 and [Mini-article 2](#)). Regarding information transfer, the Paradise Machine Model suggests that their main challenge is not retrieving information from us (as they are monitoring us), but rather sending information from them to us when needed — a phase in their approach that the Approach Theory indicates is occurring now. This communication issue, which involves challenges in sending information in the opposite direction (from them to us), likely stems from the “basic security setting” in the Paradise Machine Model, known as the *zero-risk argument* (see part 4 of the 2024 article). This zero-risk principle is the core setting in the machine’s design and essentially drives every aspect of its behavior, rooted in the overriding fear of losing control over what it would classify as evil traits, which could lead to a potential future hell state.

In a normal situation, before the zero-risk signal was emitted from Earth, information could not flow from them to us, only from us to them. Furthermore, to enable this new flow of information and reveal their existence, they must strictly adhere to the zero-risk principle embedded in the machine’s design, always maintaining a position of dominant zero-risk relative to the life form that transmitted the signal. If accurate, their signaling should grow stronger as they draw closer to Earth. By the same logic, this would imply they are increasing their control over us at the same time.

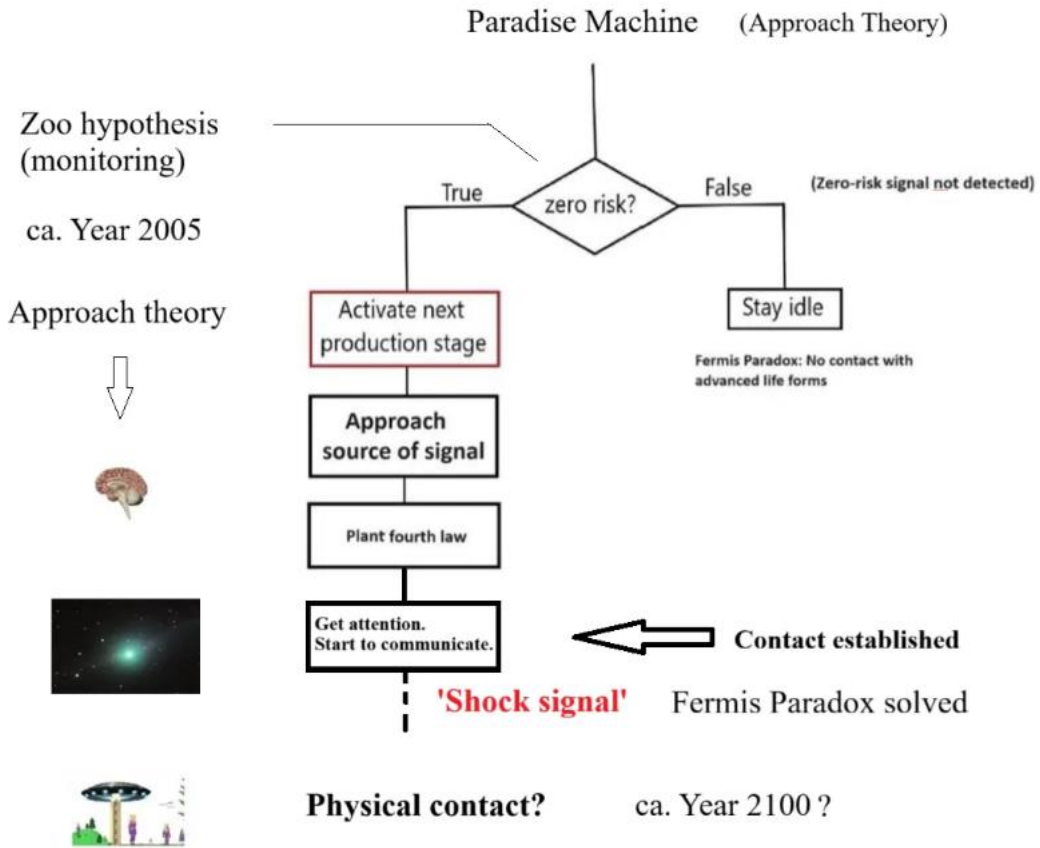


Figure 1. Overview of the Paradise Machine Model and the Approach Theory. As in a designed machine, a zero-risk signal triggered the approach of the advanced life-form that monitors all life-forms in the universe for zero-risk situations.

The significance of interstellar objects entering our solar system at non-human speeds and trajectories is that, *if* these objects were to carry information, such information would necessarily originate from advanced extraterrestrial sources. This since human technology is incapable of producing objects with comparable velocities or approach angles entering our solar system ([ref](#)). Any unusual observations from these new incoming objects, since 2017, should therefore be treated with caution.

From before, *the Approach Theory* from 2024, which proposes that Fermi life-forms have been actively approaching Earth since 2005, suggests that Fermi life-forms have since 2017 begun using *interstellar objects* as a means of communication. Starting with the very first object,

1I/‘Oumuamua, detected on 19 October 2017 (ref). Since discovering ‘Oumuamua in 2017, two particular features of these special interstellar objects have been suggested as being potential forms of ‘signaling features’ in the 2024 and 2025 papers: *Timing* (in the case of ‘Oumuamua) and *Trajectory* (in the case of 3I/ATLAS). This Mini-article adds two additional features to this potential ‘communication register’ for extraterrestrial signaling via interstellar objects: *Structure* and *Color*.

In summary, this mini-article suggests that Fermi life-forms so far have used *Timing*, *Trajectory*, *Structure*, and *Color* in relation to interstellar objects for the purpose of communication attempts (Figure 10).



Figure 2. From the New York Post, after the famous ‘intentionally hiding behind the Sun’ trajectory of 3I/ATLAS was presented by Avi Loeb’s group at Harvard to happen with less than one in a million chance. Since this “hostile behaviour” relative to the source of the stress signal had been predicted a year earlier in my 2024 article (confirming the zero-risk design in the machine), the total probability value (signal strength) for the prediction in the 2024 article skyrocketed to 1:140000. Due to the predicted behaviour of the continuation of using interstellar objects to communicate in the 2024 paper a year before, this latest recorded ‘signal’ in the Approach Theory became even stronger (higher statistical significance due to the predicting factor in the anomaly) than the previous ‘timing signal’ from ‘Oumuamua. A signal pattern which is also consistent with the Approach Theory (supporting that Fermi life-forms distance to Earth decreases over time). (Source: screenshot from New York Post, 25 Juli 2025).

Discussion and result

First of all, note that the two mini-articles 1 & 2 concerning 3I/ATLAS are not part of the main article series (2010–2025). They do not address the core principles of the Fourth Law theory; instead, they are a direct response to the incoming 3I/ATLAS in the summer of 2025.

In the fifth main article (2025) of the Fourth Law series, the focus is on calculating “signal strength” values using robust statistical data linked to documented anomalies in the interstellar object 3I/ATLAS. In this 2025 work, which focuses primarily on the *zero-risk signal* itself, I draw heavily on larger research communities, particularly the Galileo Project at Harvard, which has been at the forefront of interstellar object research since 1I/‘Oumuamua. Due to the statistical result (1:140.000 *signal strength* from 3I/ATLAS presented in the 2025 paper), it might be worth giving more attention to 3I/ATLAS as it continues its journey through our solar system. Could the object use its extended stay to send a weaker “second signal” after drawing attention with its unusual trajectory? Does it have a second act in our Solar System after the shocking trajectory anomaly?

Specifically, 3I/ATLAS appeared to turn blue behind the Sun in November 2025 (Loeb, 2025), and what looked like a reversed tail before Pheriphelon turned out to be ‘something’ moving in front of it from NASAS newly released pictures from Mars (Loeb, 2025). Could this last ‘performance’ in our solar system by 3I/ATLAS be the second act in 3I/ATLASs communication attempt, thereby adding a change of *color* (Oumuamua have already used *structure*) to its communication register (Figure 9)? A second act during its stay in our inner solar system, after a pause for about 3 weeks behind the Sun serving as the intermission between the first act (*trajectory* signal) and the second act (*color* and *structure* signal)? The first act before Pheriphelon being a demonstration of their commitment (due to the machines zero-risk design) to a zero-risk approach proposed in 2024. The strongest calculated anomaly from 3I/ATLAS, as its trajectory showed that it perfectly was ‘hiding behind the Sun’ relative

to Earth (relative to the zero-risk signal), was determined by Avi Loeb's group to have a likelihood in the range less than in a million (Loeb, 2025). This strong trajectory anomaly, aligned perfectly with the prediction in the 2024 article's *Approach Theory*, which was seen as so strange that it sparked concerns in the media that 3I/ATLAS might have hostile intentions (Figure 2). It was also around this time that the Approach Theory got some serious attention online for the first time, as I now had documented strong statistical data ('strong' relative to SETI research that is) which supported the Approach Theory published one year before (Sponberg, 2024).

I don't mean this too seriously, but I can't help noticing how 3I/ATLAS new appearance after reemerging from behind the Sun has become a kind of "graphical situation" mimicking what essentially is the symbol for the entire Approach Theory (Figure 5). Since the zero-risk signal should occupy the very center of attention for the incoming life form, as it forms the core of the machine's design and basically runs the whole paradise machine.

The approach process should have begun with a universal stress signal, in our case triggered by a successful zero-risk strategy somewhere on Earth. What the Approach Theory suggest has happened is that the zero-risk situation was indeed triggered by a deliberate project initiated three years before the actual signal was transmitted in 2005. The idea was that this art project of mine from 2002 while attending university might indeed have worked, just that it took ~20 years to see the first stronger physical effects. This project from 2002 was based on the "casino owner rationale" described in detail in the 2024 article. The project from 2002 (Figure 5) was rather innocent in that a zero-risk situation might trigger some hidden or ancient genes to help me survive (becoming a better student), as nature would favor anything that occupies a zero-risk position in the struggle for survival game — simply to protect its own ego.

The strategy was simple: If nature did not help me somehow in case of a zero-risk situation was achieved, nature's own ego would go down with my ship. That would only happen if 1) an actual measurable zero-risk situation took place in nature (in "the casino") and 2) nature actually possessed an integrated ego somewhere sensing the dangerous situation. It wasn't like I thought this would work and I did not see the social experiment "The jerk has arrived" as genius at the time (more of an act of desperation). I was very interested in nature and science and guess I'd might as well try it out, as I saw it, I had nothing to lose. And if the project did create an actual zero-risk situation, either nature was there, or it was not there.

Over time, I gradually forgot about the project and the zero-risk idea, focusing instead on my studies and the Fourth Law, without seeing this work as a possible response to the 2002 art project. The idea briefly resurfaced around 2013 when I posted the casino rationale on Facebook, but it soon faded again. Around this time, I had reaffirmed my belief in the theory after coming across Tom Siegfried's book *A Beautiful Math*. To my surprise, this book, from "the world's greatest expert on Nash," also suggested that Nash's equilibrium could indeed be compared to a chemical system seeking its most stable state. In 2014, I wrote down my experiences from 2005–2006 in the Paradise Women story to document the background of the $EU = 0 = Paradise$ formula, in case the theory would show to be valid in the future. By then in 2014, I had published two articles in the article-series on Fourth Law.

It was after I saw the movie *A Beautiful Mind* (the bar scene) about John Nash in 2009, which had strengthened my belief in the Fourth Law (which ideas later made me publish the first article in 2010). I recorded these experiences about the paradise women from around 2006 nearly ten years after they occurred, simply to document the theory in case it proved valid in the future. This indirect confirmation from Tom Siegfried in 2014 was a pivotal point. Studying his book more carefully and diving deeper into Nash equilibrium from other sources, strengthened my conviction that the Game theory mathematics truly fitted the $Eu \rightarrow 0 \rightarrow Paradise$ framework

that had emerged that crazy night in 2006. There was no doubt in my mind: even though Siegfried had never seen my 2010 article, his profound understanding of Nash's game theory matched my own interpretation almost perfectly, it did describe the process of locating a lower energy state (a more stable state) in nature's free competition (in nature's chaos). I had simply taken it one step further by embedding it into a universal system and added some assumptions about the universe, for example that it was designed to end in a paradise state of 100% love and intelligence.

My thinking in 2002 was that in theory, if a zero-risk situation was created on Earth, nature should be there to rescue itself from losing in its own game (struggle for survival game). Other than that, I had no expectations regarding how nature's response would unfold. The most natural consequence, which I thought of, was that nature was able to activate certain genes — like an emergency set of genes or something similar. For example, hidden genes that are only expressed in times of critical times and war. But never did I imagine that it would trigger an actual quantum-mechanical signal, and attract an advanced life-form, as suggested in the 2025 article following 3I/ATLAS. At this stage in my scientific career, I had almost no knowledge of quantum mechanics and had probably not even heard of black holes, as I had flunked almost all of my exams up to that point while studying chemistry.

In summary, if the Approach Theory is true, the entire process may have begun with the art project "*The Jerk Has Arrived*" in 2002. This perspective could explain the whispering episode in 2005 as the moment Fermi life-forms actively responded to detecting a zero-risk signal from Earth, with particular emphasis on the sentence "you are a genius." When I wrote the story down around 2014, that sentence still carried no real meaning for me — it was simply a strange but pleasant experience spoken by a friendly female voice. This sentence only started to make real sense much later, not until February 2024, when I was developing the Paradise Machine

model writing the fourth article in the series, and particularly while exploring the *zero-risk argument* in the machines design, combined with the new *women-baby idea*.

Thus, the “genius” part of the sentence might have referred to the theory on the casino owner rationale three years before, which now had worked without me knowing it. A very simple logic that if nature does have a self-preserving ego, it should respond if any players in the casino (any lifeform in the universe) manage to execute actual zero-risk strategies. Essentially meaning the perfect cheaters could ‘win’ money completely risk-free, which would eventually bankrupt the casino owner (i.e., bankrupt nature). Basically, the imagined “Casino owner” should respond if players that collect money from the casino could do so without consequences.

Hence, the symbol for the zero-risk signal is in many ways the cover art of *The Jerk Has Arrived* project (2002), which was the outcome of the *casino owner rationale theory* (Figure 5). Since, this graphically cover-art symbols the situation which essentially started the whole approach process of the Fermi life-forms, as the project is believed to be what eventually triggered the zero-risk signal mechanism about three years later. If the Approach Theory is correct, the zero-risk signal must be very important and central to the Fermi life-forms (perhaps representing natures ego), which also seemed to be the case in the very first Oumuamua incident 18 June 2017 ([2024 paper, part 5](#), ‘third incident’). The strong desire to draw attention to the zero-risk signal could therefore have come up again for the second time this November in 2025 while reemerging from behind the Sun (pheriphellon), by trying to mimick the album cover on the zero-risk project from 2002. In that case, it would be the second time one of the interstellar objects tried to draw attention to this central zero-risk theme in the Approach Theory. The first time being in connection with the arrival of ‘Oumuamua in 18 June 2017 ([2024 paper, part 5](#), ‘third incident’). This is because the core ideas for the third article in the series examined how a zero-risk signal in the quantum world could generate an instantaneous universal response to zero-risk strategies. This new concept, which in theory could explain the

wave-particle duality experiments, excited me so much that I posted it on Facebook and in the new section on headbiotech.com on June 18, 2017. At that time, ‘Oumuamua was silently approaching Earth and had already entered the inner solar system. It later passed near Earth on October 15 and was discovered on October 19, 2017. However, when viewed through the lens of the approach theory in 2024, the timing of these events stands as one of the most powerful messages in their strategy since 2005: “This signal was what brought us here.”



Figure 3. Data structured illustration of Ouamuamua. Width:Length ratio 1:10 (Credit: M. Kornmesser).

Illustration of Ouamuamua's 1:10 Width-Length ratio

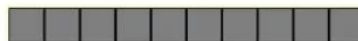


Figure 4. 1i ‘Oumuamua is noted for having a unique structure with a width-to-length ratio of 1:10. (Own work).

‘Oumuamua was shaped like the number “1”, with a width-to-length ratio of 1:10 ([Loeb, 2024](#)), something never observed in space before in ‘mid air’. Our Solar System does not seem to have

been visited many times by interstellar objects resembling the number *I*, neither in any of the IM objects registered. In summary this suggests that if interstellar objects are used by advanced life-forms to communicate, they may use a combination of *structure*, *trajectory*, *timing*, and now perhaps even *color* as ways to convey information (list at the end). This initiative to create such a mapping is more an attempt to spark discussion than to set any definitive standard for such a potential “alphabet.” It is simply my contribution based on my theory.



Figure 5. Is the recent 3I/ATLAS situation after perihelion a “second act” in their communication attempt? Using the same object to communicate twice? This cover art should serve as a powerful symbol of the zero-risk signal, representing the very source that created it three years later (Own work).



Figure 6. A symbol of 3I/ATLAS turning blue after perihelion, with its bluish tail trailing behind? (Own work).



Figure 7. 3I/ATLAS turned blue when reappearing from behind the Sun. NASA then released the best images of 3I/ATLAS yet, revealing that the reversed tail was actually 'something' positioned in front of the now blue object. (Source: [Avi Loeb](#)).

Orientation of the Plume Around 3I/ATLAS in the HiRISE Image



Avi Loeb

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The newly released HiRISE image of the interstellar object [3I/ATLAS](#) available [here](#), shows an extension of the glowing plume in the direction of motion ahead of 3I/ATLAS. It appears like there is something preceding the object that was previously confused with being in the direction of the Sun but is actually in the direction of motion. In previous images like the Hubble

the surface of a natural comet, it takes only a day to cross that distance. Could this be a technological signature of illuminating or clearing the path from any hazardous micrometeorites that may cause damage to a technological object?

Figure 8. Recently the new images released from NASA after the shut-down was that the reversed tail instead was something in front of the now bluish 3I/ATLAS. (Source: [Loeb on Medium](#)).

Oumuamua also seemed to draw attention to the zero-risk signaling theme (picture below) by creating statistical significant anomalies. Timestamps show that the first ideas for the third article — and eventually the universal zero-risk signal — were launched on 18 June, just as Oumuamua had entered the inner solar system. In addition came the “unique picture incident”, calculated to happen at random with a probability of $\sim 0.016\%$. That is, the only time I have ever taken a photo of the Head Biotech name since I started it in 2009 was on 19 October 2017, which should happen at random chance $\sim 0,016\%$ (a rather strong anomalie connected to the article series). Also, thanks to Facebook for this, without these electronic timestamp proofs, there would never have been an Approach Theory. I had completely forgotten about these dates while writing the [2024 article](#) (I hardly remembered ‘Oumuamua at all). When I came across Oumuamua cases online during the investigation process on Black holes (which was the initial goal with the 2024 paper), I thought, “Hmm... wasn’t 2017 around the time I first got those ideas for the third paper?” Then I checked my old Facebook pages, and the timestamps were there. Alongside the women-baby concept, a theory of approach began to take shape while writing the 2024 paper. In this case, the driving force behind it all (their approach) was likely the zero-risk art project from 2002 (the jerk has arrived — project), which has been suggested in the Approach Theory to be what the Fermi life-forms referred to in their very first active contact; the ‘you are a genius whispering episode’ about 3 years later in 2005 (which actually was not a *whispering* sound per se, but a soft gentle female voice).

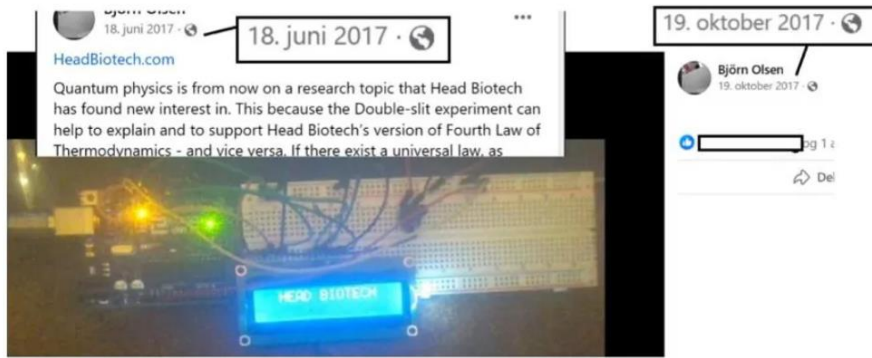


Figure 22. Actual screenshots of the facebook posts in question, before Oumuamua was discovered. Bottom: on the same day Oumuamua was discovered from Hawaii 19 October 2017. Hence connecting the name Head Biotech with the first registered visitor from outside our solar system ever recorded. Top: As the first idea to the third article appeared I updated this on fb. At the time my fb page was under the name: "Björn Olsen". I made the same update on Head Biotech's homepage. The update is still there if you scroll down to 2017 (headbiotech.com).

Figure 9. Screenshot from Sponberg, 2024, part 5, figure 22 (Own work).

Summary

COMMUNICATION LANGUAGE

Deciphering the symbolic "alphabet" used by interstellar objects.

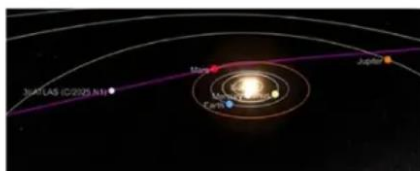
Structure



Color



Trajectory



Timing



Figure 10. The four suggested features the incoming Fermi lifeform has used so far to communicate.

Anomaly overview in relation to the Approach Theory.

STRUCTURE: [1i ‘Oumuamua shaped like the number “1”]. [3i mimics the symbol of what triggered the zero-risk signal (‘the jerk has arrived’ project from 2002) (in combination with changing the color to blue)].

TIMING: [1i ‘Oumuamua was entering our inner solar system as the ideas for the zero-risk signal were born, resulting in the third paper]. [NASA’s MAVEN Mars probe went offline 14 days after having delayed the release of images of 3I/ATLAS (Mini-article 2)]. [Only published photo of the hub for the article series *Head Biotech* uploaded on 19 October 2017, the day ‘Oumuamua was discovered].

TRAJECTORY: 3i 3I/ATLAS shows strong risk-reducing behaviour, hiding perfectly behind the Sun in accordance with the Approach Theory launched the year before.

COLOR: 3i 3I/ATLAS turned blue in a “second act” after perihelion to mimic the symbol of what drew their attention to Earth, the signal for zero-risk as a result of ‘the jerk has arrived’ project in 2002.

References

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