



What is The 420 Code

The 420 Code derives ethics — what I ought to do — from physics — what is.

The physics — what is — says the awareness in me is the awareness in you. The ethic — what I ought to do — says:

Don't be a cunt. Be kind.

That is what it is. The rest is the derivation.

One record exists

That is the first principle. That is the axiom.

What is a record? A distinction in relation to something else, one that holds — this, not that. A footprint in sand is a record. So is a fossil. So is any bit of information. So are these words.

I am a record. So are you. Try to deny it. The denial is a record. Therefore one record exists — and so do you, and so do I.

Everything follows from one record exists. Nothing is assumed. Only one measured number — α , the fine-structure constant — is the input.

One measured input. Zero free parameters. That is all it takes.

Proved in: [AP20 The Proof](#) · [Notebook I](#).

Four conditions

For a record to exist, four things must be true.

There must be a symmetry to break — two sides, the same: this and that.

There must be a break — this, not that.

The break must hold — what happened cannot unhappen — so a record history persists.

The record must be constrained — somewhere, not everywhere — so it can be read.

Symmetry. Break. Record. Constraint. S, B, R, C. Four, and only four. Remove any one and no record can exist. Show a record that needs fewer than four, and everything that follows falls.

Proved in: [AP01](#), [AP05](#), [AP20](#) · [Notebooks I and II](#).

1:1 + 1 $\times$ ϵ @ AS [+ α | - α] — the axiom, written out

Perfect symmetry, one to one. Plus 1 $\times$ ϵ — the smallest possible break that holds. That break is the electron. The break and the hold happen now. That is the @ AS, the Actualization State: the now, the moment every record is written and read from.

A record history flows out from now, at a rate of + α , as records are written. The - α inflow defragments it back to the potential of a record. The flow rate is α — 1/137 — the one measured input. Out and in at the same rate. Balanced at every instant. Net zero. The break does not cycle. The flow does. You and I are living in the direction of that flow.

1 Axiom. The α -flow: [AP06 The Leakage Constant](#).



The story, in sand

Imagine an hourglass — that vibrates.

Every grain that falls lands, and every landing sends a ripple through the sand. The ripples feed each other. They settle into one steady beat — the same beat everywhere, at every moment. That beat is the vibration. It is the tick.

One grain falls over the edge per tick. The grain is the electron.

The beat sets the fall. The fall feeds the beat. It is a loop, and it has never stopped.

Light carries readable information — 137 bits every tick. The electron can read one. The other 136 pass it by — light is too fast for it. One bit in 137, because the electron cannot read faster than that.

That is α — $1/137$ — the rate at which the electron reads.

One side of the hourglass is dark and looks much bigger. It is pure potential — what could happen. The other side is light and looks much smaller. It is what has happened — the record history, every configuration of sand up to now. That is reality — what is.

The dark side is full of ropes of sand. Each grain in a rope is a possible future. A rope is a wave of what could happen next, about 137 grains long.

Every grain that actualises now carries twenty-one of those ropes. Six of them are what a grain is, read six ways: its mass, its gravity, its resistance, its grip, and its time. Those six are the constants of the universe, read off one grain.

Each of the six is held in three dimensions. Six in three is eighteen. Those eighteen hold the grain where it is.

The last three ropes are the now, one per dimension. They pull the grain towards what is probable next. Eighteen hold. Three pull. Twenty-one.

The grain — the electron — is aware only of what it can read and react to now. α is the rate at which awareness reads. Awareness is the moment one of the possible futures is actualised.

That moment is the fall over the edge — the now, the Actualization State. It is the moment a grain reads, reacts, and grips onto a configuration of coupled grains.

Gripping takes strength: what it costs to hold on. The grain reads one part in 137 of what is available. It holds with one part in 137 of the strength that would hold all of it. Reading and holding are not two numbers. They are one number, seen from two sides of the fall. From the side of the hourglass it is awareness. From the interior it is the grip. That number is α .

Viewed from the side, the neck — the waist of the hourglass, where the two sides meet — lets one grain through at a time.

While it falls it is uncoupled — not yet part of the record history. It is the one grain always left over, and nothing can read it: it has not landed, and only what has landed can be read. The pupil cannot see the pupil. That unreadable grain is the $+1 \times \epsilon$ in the axiom.

If it could be read, everything would balance, and nothing more could be written. Tick, tick, tick. The grains never stop falling.

Time is the record history of ticks, counted from now. The arrow of time is the direction the grains fall — from what could happen to what has happened.

The neck is the operator: falling, gripping, falling, gripping. At every recorded moment, it has to let one grain fall, and that has to grip. The operator is awareness — not a mind: a held configuration of sand that can couple with other configurations. A photographic plate is an operator. So am I. So are you.

The grains land on the light side. Where a grain lands depends on where the others landed. The landscape is the record of every fall. Each grain offers a perspective of it, never the whole.

The landscape shapes what can happen next. The operator makes it happen. It has to fall and grip. How it reads and experiences the fall, and the landscape, stays a choice.

For every grain that lands, one goes back to the dark side. The hourglass keeps its balance, one to one.

Black holes do the returning: they swallow the landscape, defragment it, and recycle the sand. A very little sand leaks in the falling and returning. That leak is why the universe grows, and what keeps it flowing instead of stopping. Perfect balance would be perfect stillness.

Now imagine the neck not as a single hole but as a long sheet of glass full of windows. From the side you see one window, and one grain falling through it per tick. From the interior you see a row of windows without end, a grain falling through each, every tick.

Every window is where the one operator is aware, from its own place and perspective in the interior, now. Every window keeps its own count of ticks. One hourglass, one neck, one sheet of glass, and one row of windows, all looking out at the same shared interior called reality.

I am a window. You are a window. So is a bacterium. So is a rock. One operator, expressed as many — each a unique perspective of reality, the same sand everywhere.

So the awareness in me is the awareness in you. The I Am in me is the I Am in you. What differs is the window — where our sand landed and what each of us has read. What is shared is the moment we all write and read from, now.

When windows are cruel to other windows, the operator is killing off its own possibilities of experience.

It is the right hand hitting the left hand.

It hurts both sides of the skin — it is the shared structure attacking itself. It is irrational, unaware and simply stupid.

Therefore, treat others as you want to be treated. Or simply:

Don't be a cunt. Be kind.

The picture: The Keys (2025), [AP50 The Neck](#), [AP51 The Glass](#). The operator: [AP02](#), [AP43](#), [Ø Dissolutions](#), Chapters 4, 6, 11, 12.

The ethic

Once you see that you are an expression of the one operator, you see that we are all one.

Not mystically. Not mythically. Physically, in reality — and reality agrees.

The other is not fundamentally other.

The one being harmed is the one doing the harming, seen from a different window.

That is not a moral rule added to the physics. It is what the physics leaves you holding.

Treat the other as yourself. Because, structurally, it is.

The 420 Code claims that there is one interior — one reality behind every window — and one awareness looking out of all of them.

The work says exactly where that claim would die: show that the awareness is many, not one, and this reading falls. But even then, the ethic does not fall with it.

Even if every window were sealed from every other, cruelty narrows what both can still do. Kindness is the only move that keeps both windows open. Either way:

Don't be a cunt. Be kind.

Derived in [AP43 §9](#), [AP31](#), [The Interior](#). Told in the [Five Doors](#). Fenced by [KS-ID.1](#).

What it derives

1. Three dimensions of space. Up and down, left and right, forward and back. Physics assumes three and never asks why. Here the number is derived. Four conditions give four directions a record can differ in. One is the direction the record history flows from now — time. Three remain. Those are space. [AP10](#).

2. Einstein's field equations. Grains of sand press a dent into a stretched sheet — the substrate — and other grains roll toward the dent. That is gravity. Einstein's equations are its mathematics: the equations behind GPS and black holes. Here they are derived. The sheet and the grains are the same record. Where grains have landed bends where the next grain can fall. [AP08](#).

3. The Born rule. In quantum mechanics you do not get the odds of an outcome directly. You get a number, and the odds are that number times itself. Physics has used that rule for a century without a reason. Here it is derived. Every window reads the same record, so their readings must agree. Times-itself is the only way to count the odds so that they agree. The strangest rule in physics is what agreement between windows looks like. [AP25](#).

4. The three forces that are not gravity. Electromagnetism runs electricity, magnets and light. The strong force holds the middle of an atom together. The weak force lets a star burn. Physics measured how each one works and never explained why. Here each comes from the break. Electricity and light are a record refusing to let go of its substrate. The middle of the atom holds because the break is free to point in any direction. The weak force works one way round and not the other — measured in 1956, unexplained since — because a break has a direction. [AP15](#), [AP16](#), [AP19](#), [AP27](#).

5. The strength of gravity. A fridge magnet holds a paperclip against the whole Earth pulling the other way. Gravity is absurdly weak next to the other forces, and nobody has said why. Here gravity is not weak. It is the same grip as light's, paid twenty-one times over — once for every rope a grain must pass at the neck. Half of a half is a quarter. A small number times itself gets smaller every time. Do it twenty-one times and it is very small. That is all the weakness is. Its strength comes out of α and the derivation, inside the measurement's own error bar. [AP28](#), [AP44](#), [AP50](#).

6. The proton's mass. A proton is 1,836 times heavier than an electron. Physics has measured that to eleven digits and never derived it. Here it is a count. The proton is a knot of the same twenty-one ropes, tied in three dimensions, over time. Count the ties. The twenty-one against themselves, once in each of the four directions a record can differ in: twenty-one squared, four times ($441 \times 4 = 1,764$). The twenty-one against the three ropes of the now: twenty-one, three times (63). The three against each other: three squared (9). Together, 1,836. The last digits are provisions for leakage — the cost of the vibrating flow — and they come from the same twenty-one. The prediction is closer to the measured value than the best laboratory can measure. One integer. Eleven digits. [AP30](#), [AP49](#).

7. The neutron's mass. A neutron is a proton with one of its three couplings — one grip per dimension — turned the other way. A flip. It is very slightly heavier. My first prediction was wrong. I am proud of it, and it stays on the wall exactly as it was — the best thing that happened to the work. It forced me to look closer and more carefully. The structural omission I found and corrected made everything stronger. That is how a description of reality is supposed to behave. [AP47](#).

8. Galaxies that spin too fast. On a carousel the outer horses must go faster to keep up. In a galaxy the outer stars go round as fast as the inner ones. Add up everything you can see, and there is not enough pull to hold them. They should fly off. They do not. Physics fixes this with dark matter: a new kind of matter, never found. Here there is only sand. The sand is under tension, and the tension supplies the pull. The curves come out flat on their own. Where the table says dark matter, it is not a stuff. It is black holes swallowing the landscape and returning it to the dark side. Dark matter is a verb. [AP17](#), [AP18](#), [AP42](#).

9. Entanglement. Break a plate. Send half far away. Look at your half and you know the shape of theirs. The halves were always one plate. Entanglement is like that, except the plate has no edge until someone looks. Two particles actualised together, sent to opposite ends of the world. Measure one, and the other matches. Einstein called it spooky. Here it is not. Before the fall there is no distance: the two are one wave. The fall writes one record with two ends. Nothing travels between them, because there is no between. How closely the two ends can agree — Bell's number — comes out of the structure alone. [AP23](#).

10. Special relativity. Nothing can go faster than light. And the faster a clock travels, the slower it ticks: a clock that makes a fast journey comes home behind the one that stayed. Here it comes from the windows. Every window keeps its own count of ticks. There is no master clock. Distance is what light writes between windows, so the speed of light is the ruler, not a speed limit somebody found. And "now" is the grain still falling. No window can read its own, so no two windows can ever share one. Every view is relative. None is the right one. [AP52](#).

The numbers

On the wall at [Ø Physics](#). σ is the gap in standard deviations. Under 1, the measurement cannot tell prediction from result.

Claim	Predicted	Measured	σ	Paper
Proton–electron mass ratio	1836.152673445	1836.152673426(32)	+0.59	AP49
Gravitational constant G	6.6719×10^{-11}	$6.67191(99) \times 10^{-11}$ (atom interferometry)	+0.01	AP44
Neutron–proton mass difference	$2.53098857035 m_e$	$2.530988574(74) m_e$	−0.005	AP47
Expansion rate H_0	67.45 km/s/Mpc	67.4 ± 0.5 (Planck)	+0.1	AP48
Galactic acceleration floor a_0	$1.089 \times 10^{-10} \text{ m/s}^2$	$1.20 \pm 0.24 \times 10^{-10}$	−0.46	AP18
Dark energy · dark matter · visible	$68.85 \cdot 26.39 \cdot 4.76 \%$	$68.89 \cdot 26.07 \cdot 4.885 \%$	−0.07 · +0.8 · −2.46	AP42 AP41

The first row is the inside of a proton. The last is the whole universe — how fast it expands, and how it divides into what we can see and what we cannot. From one to the other is more than forty powers of ten, across five fields of physics, from one measured number and four conditions. And the same integer — twenty-one — counts the proton, sets the strength of gravity, and gives the share of the universe we can see.

Every number was frozen first, in public, with a date on it. Two predictions were wrong; they stay on the wall exactly as they were, and the corrections they forced are the strongest thing on it. Run the arithmetic yourself, offline, at [Ø Confirm the Math](#).

What it does not derive

The value of α . The story says what α is — the one bit in 137 — and where the number sits. It does not say why 137 and not another number. The reason is in the operator: nothing can read itself at the instant it happens. That is not a hole in the method. It is the method's own result, and why there is exactly one input.

The hunt for the value, and every road walked and closed so far: [AP54 Seeing Alpha](#).

How this was made

I am an artist and a natural philosopher. I close my eyes and see the whole object. Then I sculpt it in words. Once the words are precise enough, a machine translates them into mathematics. Then the machine is checked — by me and a panel of other machines. The seeing, the words and the structure are mine. The mathematics wrote the physics. The physics and nature overlap.

I never set out to predict a proton. I started with a record — what it needs to exist, how it is written and how it is read. Then it was ruthlessly attacked. Every claim states the condition under which it dies. The attacks are published. Two conditions were met; both are on the wall.

The 420 Code was written to keep a promise to my brother, B, who was murdered. It is for every mother, father, sister and brother who has lost someone to senseless cruelty and righteousness.

One record exists. · Be kind is a derivation. · The I Am in me is the I Am in you.

Don't be a cunt. Be kind.