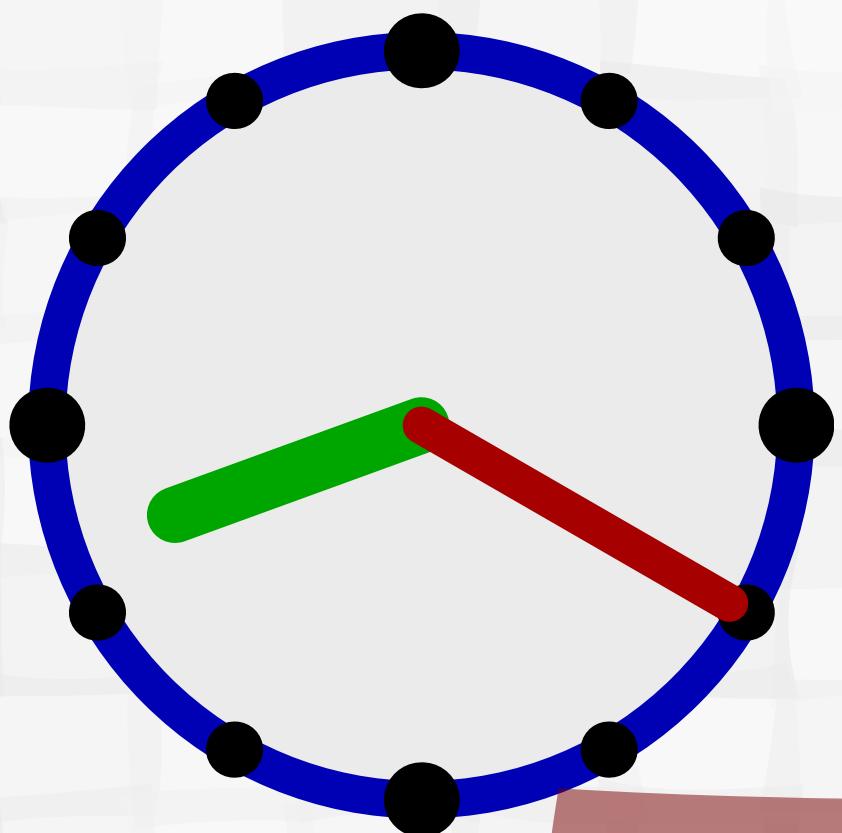


# MetaPost Graphics

Once upon a time we started using MetaPost, the graphic companion to `TEX`. Since then it has been our main tool for making graphics. Welcome to our little showcase. You can click on the graphic to show the real thing.



This is our 1998 christmas card graphic. It visualizes the count down to the millenium. It's a real count down: there are 12 60 clocks.



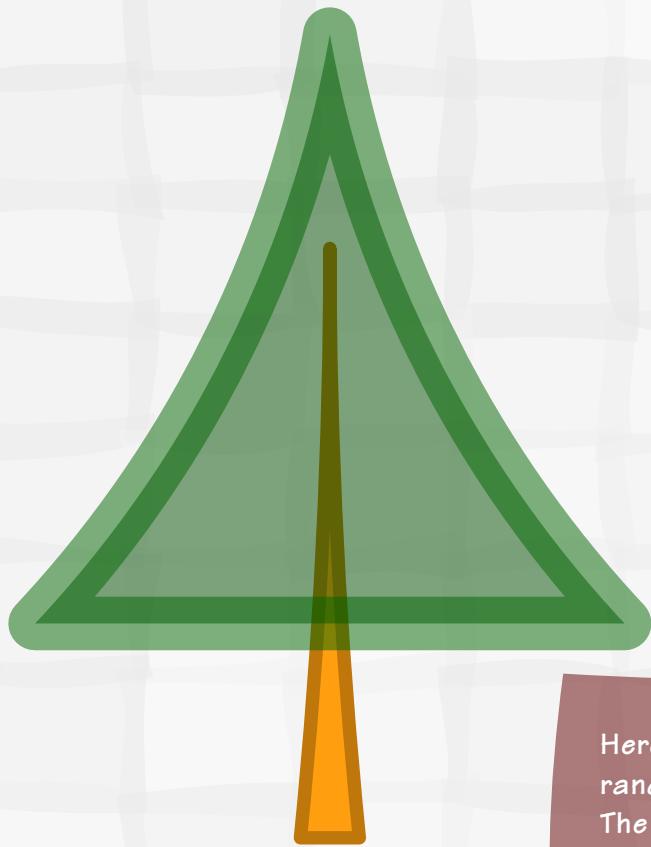
This candle is the basis for the 1999 christmas card. We let MetaPost generate 100 different candles and let  $\text{\TeX}$  treat each candle as a word. So, the core of the card is just a typeset paragraph of graphics. Each card itself was different.



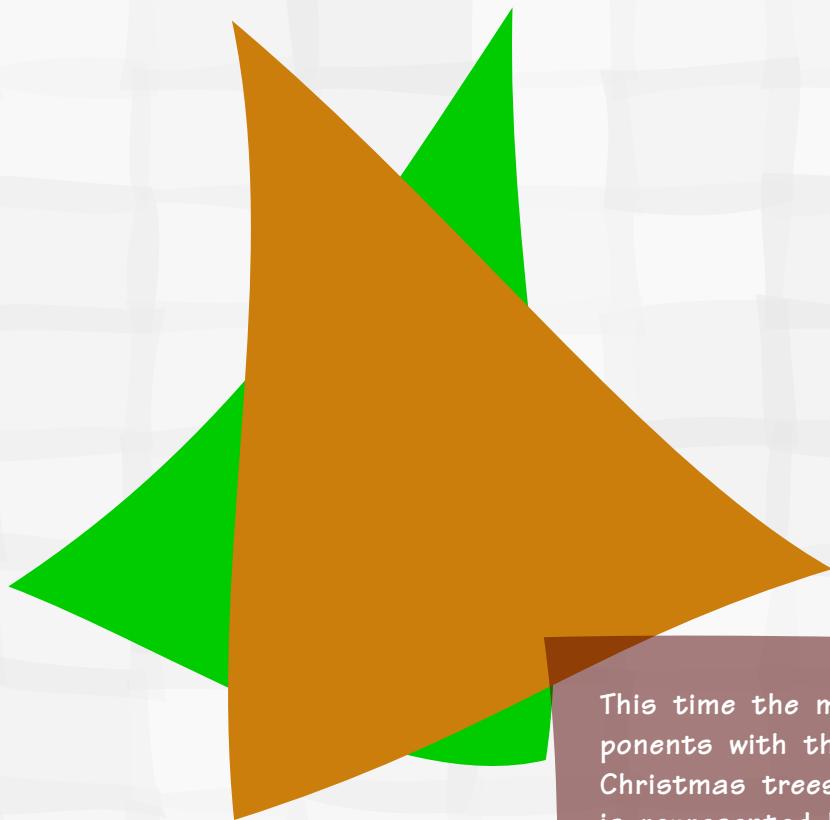
*Many of the graphics made at Pragma ADE have one thing in common: randomness. This is also true for the 2000 christmas card, which shows 2001 stars in our company's color.*



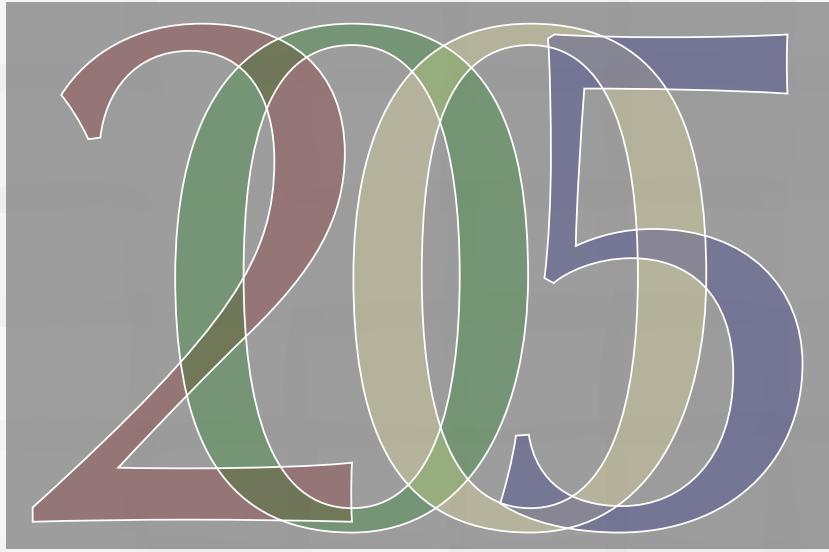
This tree was the building block of one of the concepts for the 2000 christmas card, but the overall design was too inefficient for an inkjet printer. In 2001 support for transparency was added to ConTeXt, so we gave this tree another chance. Instead of random green colors, we now use the colors of the dutch flag.



Here is another christmas tree. This time we randomize the trunk and body out of needles. The randomization takes place within predefined shapes. The composition is made out of three times 2003 needles, wood chips and snowflakes. Of course each card is unique.



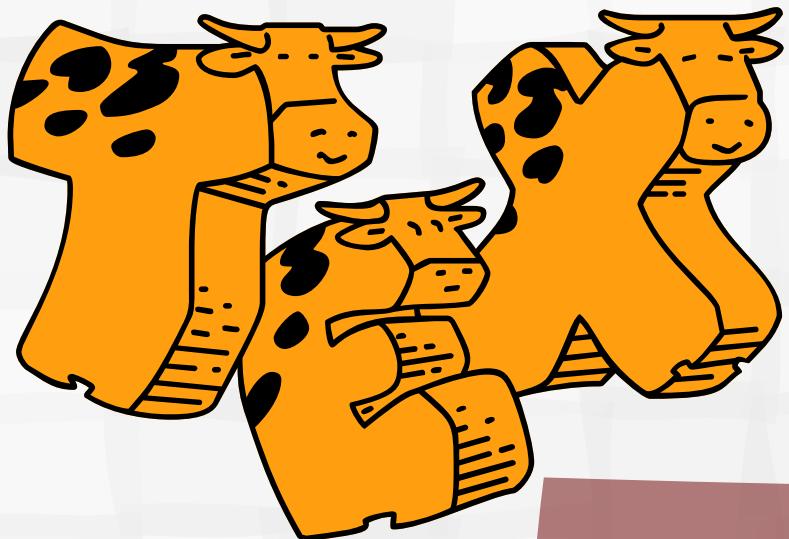
This time the main picture counts 2000 components with the triangular shape familiar from Christmas trees. The 4th year of the millennium is represented by the four shapes below the text; for them we used our company colors. If you look for a long time to graphics like this, you imagine seeing patterns in what actually is a random graphic.



I started (as usual) with some random graphic, this time using the Hermann Zapf's Optima Nova font. Lack of space for detail made me drop that variant and stick to simple transformations. This font is one of the most beautiful font design I know. Optima Nova also translates well into a happy new year wish.

# MMVI

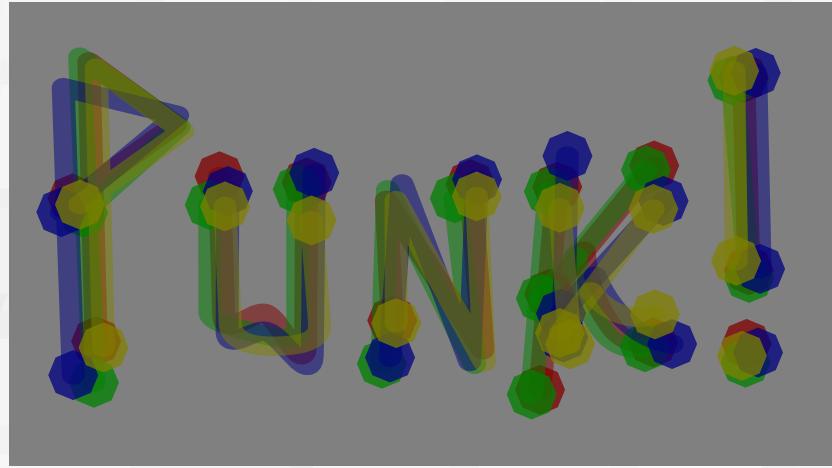
This time we show all the roman numerals I-MMV as one long sequence, typeset in a square paragraph with linebreaks chosen in such a way that we get a full block of text. A typical T<sub>E</sub>X job. Here we show the version with Hermann Zapfs brand new Palatino Nova, but the card itself was done in Optima Nova with HZ optimization.



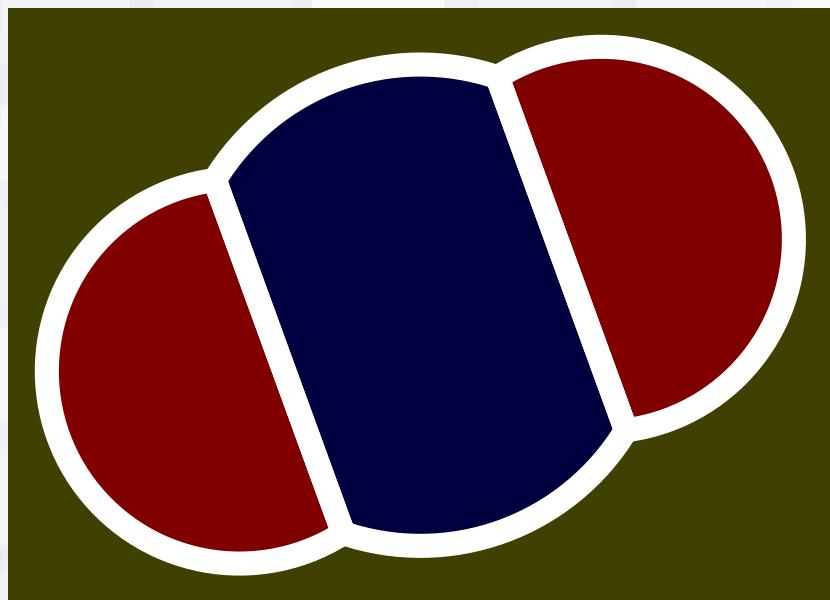
Halfway 2006 the cowfont (koeieletters) was added to the ConTEXt distribution. This font is a combined effort of Duane Bibby, Taco Hoekwater and Hans Hagen. In addition to regular characters, it also provides cow-math and bunch of logo's, accessible as ligatures. Apart from being a nice font, it also provides a playground for (new) T<sub>E</sub>X features.

hZ

In 2007 Hermann Zapf, Taco Hoekwater, Volker Schaa en Hans Hagen cooperated in a project that resulted in a reshaped design of the familiar Euler typefaces which is dedicated to Don Knuth's 70th birthday. Since it is a math font, in this card we used some number trickery. In addition to the traditional Euler fonts, we used a special text version.



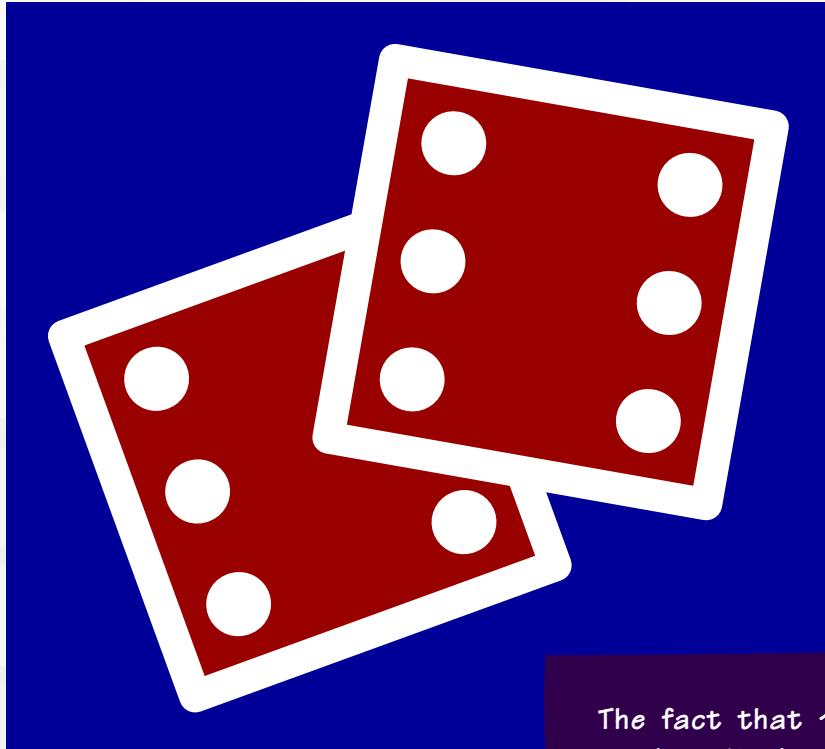
Sometime in 2008 the MetaPost library was added to Lua $\text{\TeX}$  and we celebrated that with implementing runtime generation of Don Knuth's punk font. The card is generated using  $\text{\TeX}$ , MetaPost and Lua. A careful examiner can find several occurrences of three words that were frequently heard in 2008.



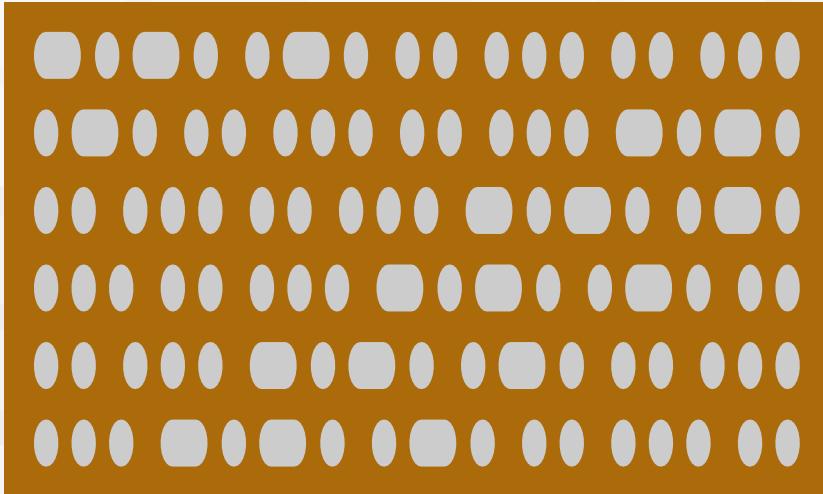
Around the time that the annual card was to be made, the Climate Conference in Copenhagen turned out to be a failure. The CO<sub>2</sub> concentration in the atmosphere is getting close to 400 ppm in 2009 and it will get worse. Hopefully we will never see a concentration of 2010 ppm.



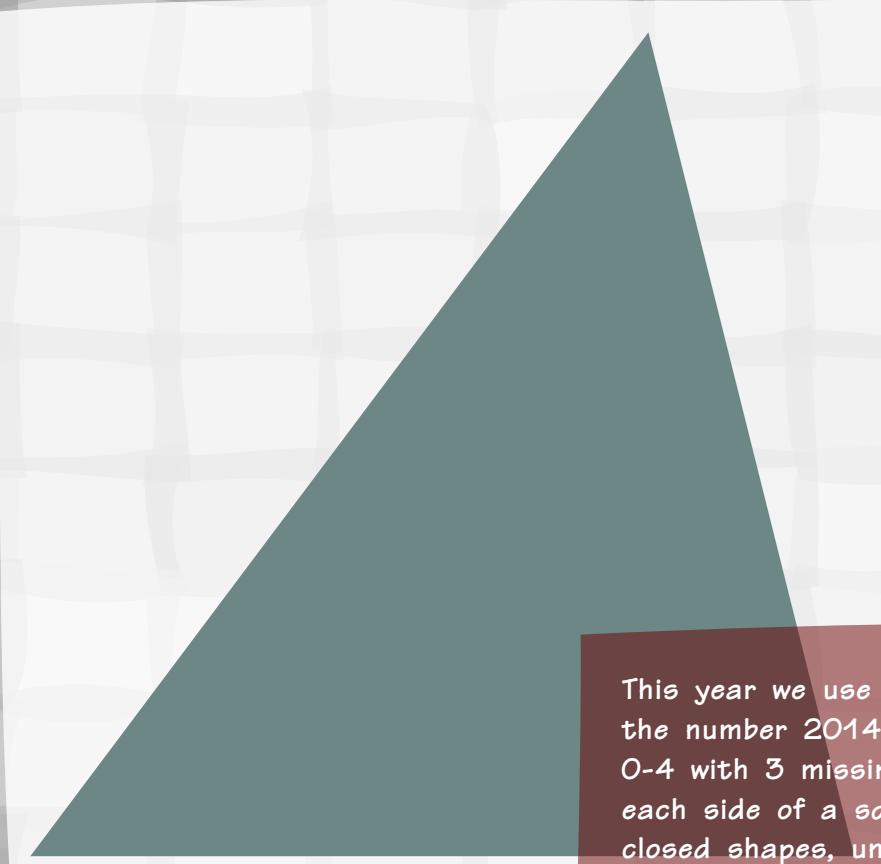
As 1 plus 1 equals 2 and 1 minus 1 equals 0, on this card we create the 20 out of ones. The basic shapes of the numbers are taken from the punk font. The ones got a serif to make things look nicer and its randomized path gives some spice to the whole.



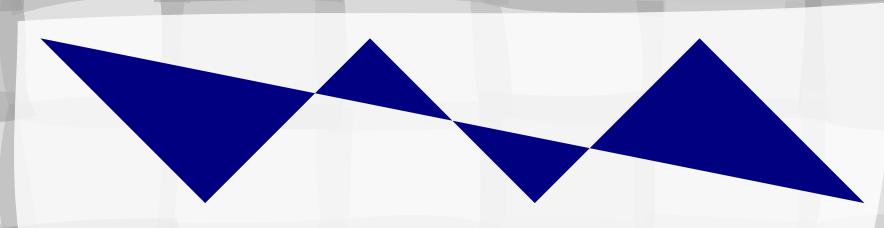
The fact that 12 equals two times 6 brings us to dice. Each card that we sent out had (as usual) a different look and shows a (random) series of dice that accumulate to 2012. We end up with 24 times 24 dice on each card and it is a nice excercise in statistics to figure out why there are so many islands with similar dice.



All this endless talk about crisis and disaster coming made me wonder if it has been coded in the DNA of time. This years card is a concatenation of all year in zeros and ones from 1 till now. Indeed, hidden in this sequence are several instances of crisis encoded in morse. Not much crisis ahead.



This year we use the four digits that make up the number 2014 to get the graphic, so we have 0-4 with 3 missing. They make four points on each side of a square and we connect them into closed shapes, unless they are the same. The combinations of four points also determine the colors. This gives the visual effect of seeing triangles and these make stars. Each card is (as usual) different, but only in the order in which the colors are assigned differs.



The card is using the numbers 20 and 15 to create a horizontal and vertical pattern. By alternating through the numbers we get a spiked path while by going back to the starting point we get an alternation due to the way paths are rendered. This turns a rather simple graphic into a more chaotic pattern mess.



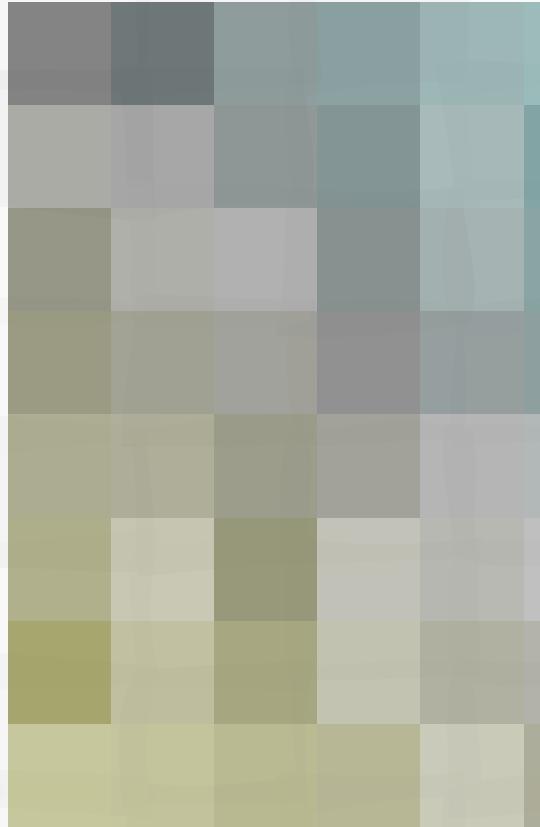
This year using the peace sign makes more than sense. And as peace has a random property the 2016 signs are rotated randomly which gives a random pattern. Of course each card we send out is different too.



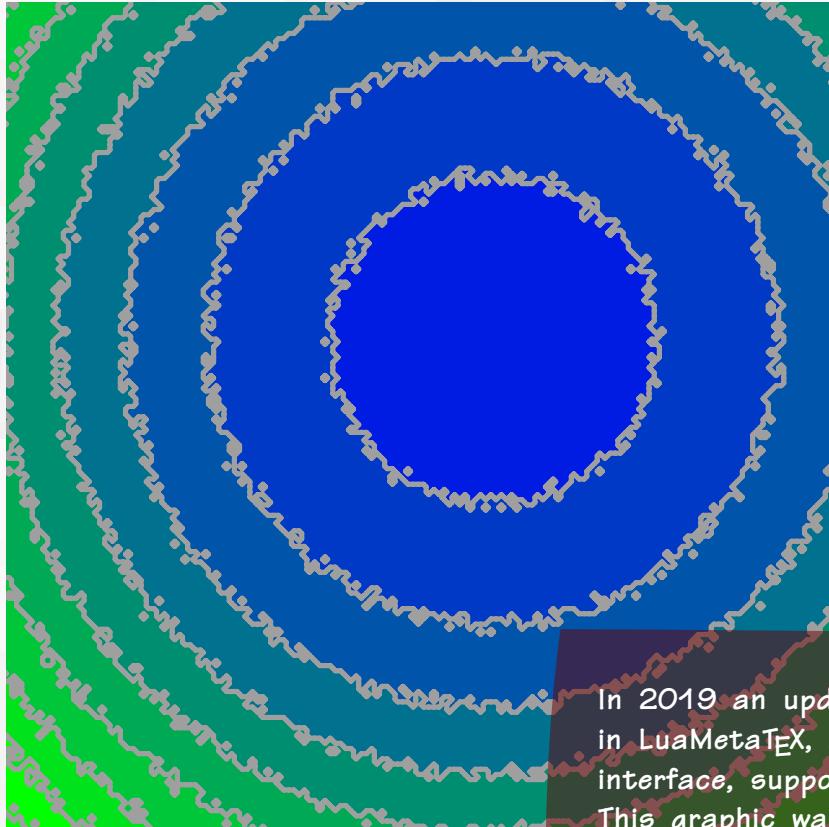
We can only hope that 2017 is a better and more constructive year for the European Union, which is why this years card draws the 2016 map of the union using the symbol that decorates its flag — times per randomized card. In a few years the contours might look quite different. Imagine for a while your country being added to or removed from the picture.



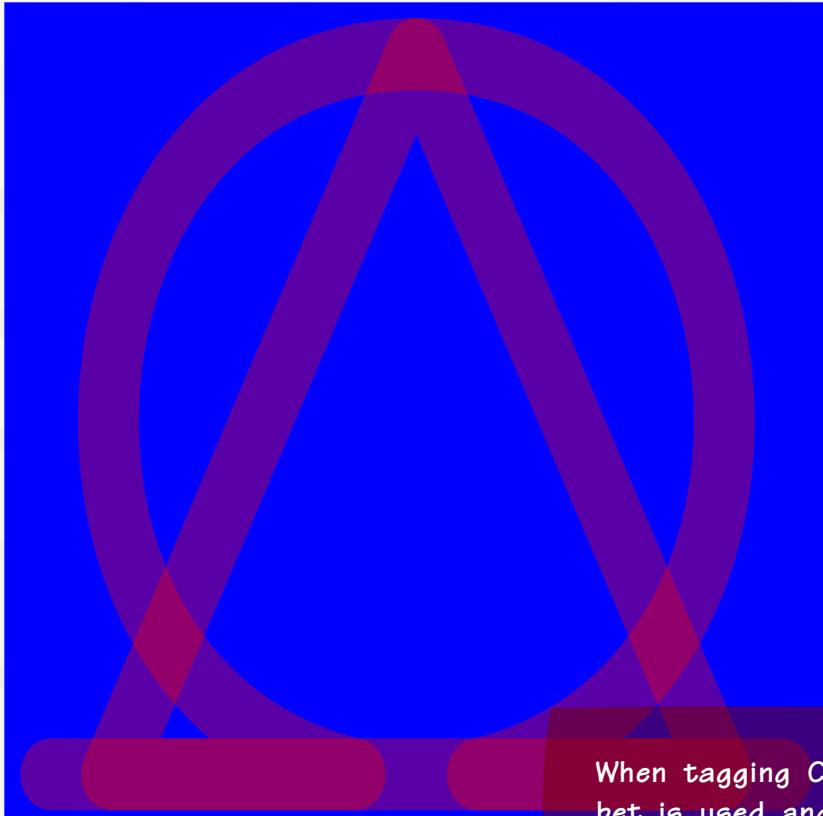
As we want a green world, this year uses the set of three emoji that visualizes the world as we know it. We show 20 times 18 symbols in sets of three, of course randomized a bit. The latest font trickery is used: the emoji themselves have color palettes that use transparencies (we overload the normal colors as set in the font) and the text font used is a so called variable font.



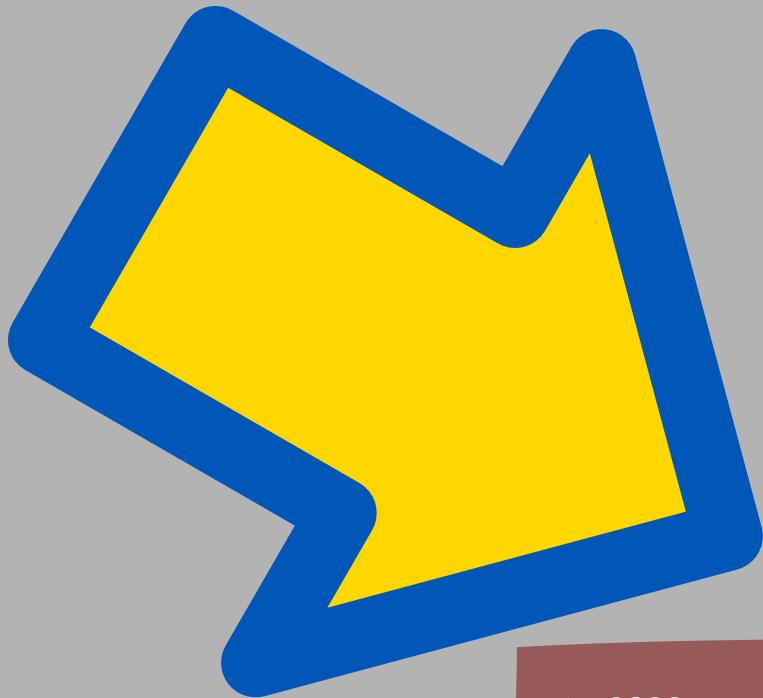
Late 2018 I saw a nice spread in the paper of the universe as a whole but very course. The colors were as in this card and as usual artifical but nice. It reminded me of reading Rare Earth by P.D.Ward and the fact that our fragile planet is kind of unique and we're spoiling it. Let's hope that sanity kicks in before climate change backfires on us. As usual each card we send is unique (randomized) too.



In 2019 an updated MetaPost library showed up in LuaMetaTeX, and, using the additional extension interface, support for contour plots was added. This graphic was one of the tests and it reminded me of a history teacher explaining that it sometimes looks like idea that l'histoire se rpté. Let's just hope that errors from the past don't get repeated in the years ahead.



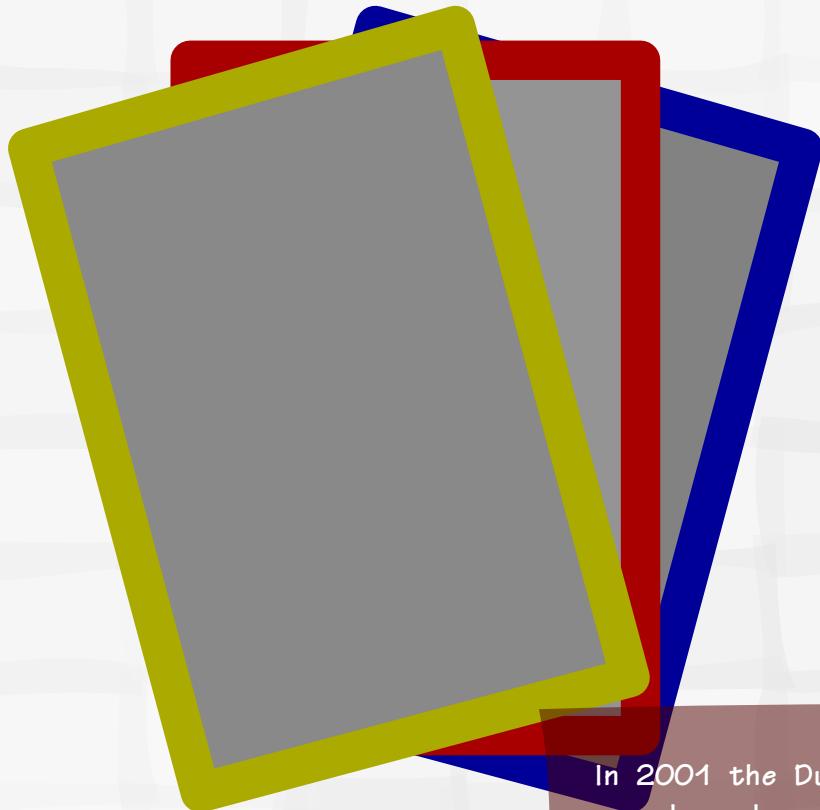
When tagging Covid variants the Greek alphabet is used and we're currently at the Delta, so (one of the) the 2021 card plays with that. Let's hope that we sorted out matters before we reach Omega and run out of names.



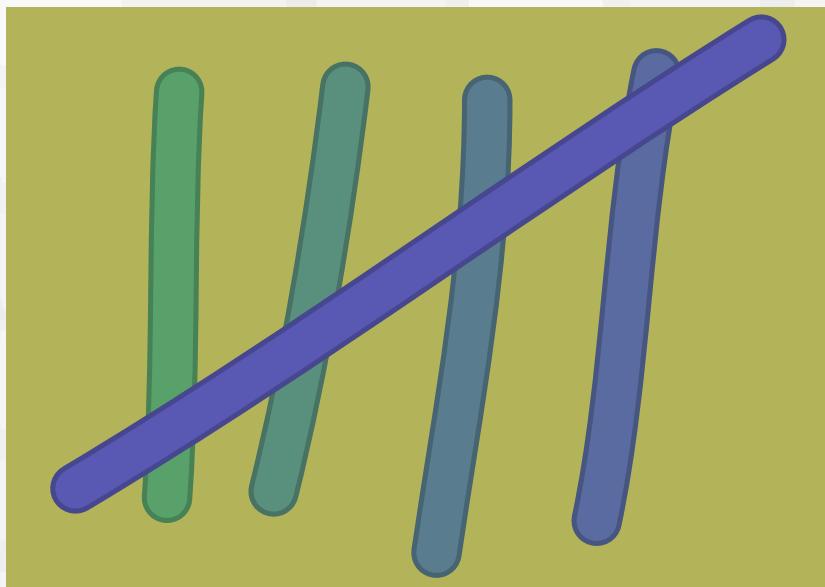
In 2022 we added some more (large) path magic to MetaPost and here it gets applied: we basically have a single path dashed with arrows. The slight randomness reflects the fact that we can never predict the course history takes and 2022 is a good example of that.



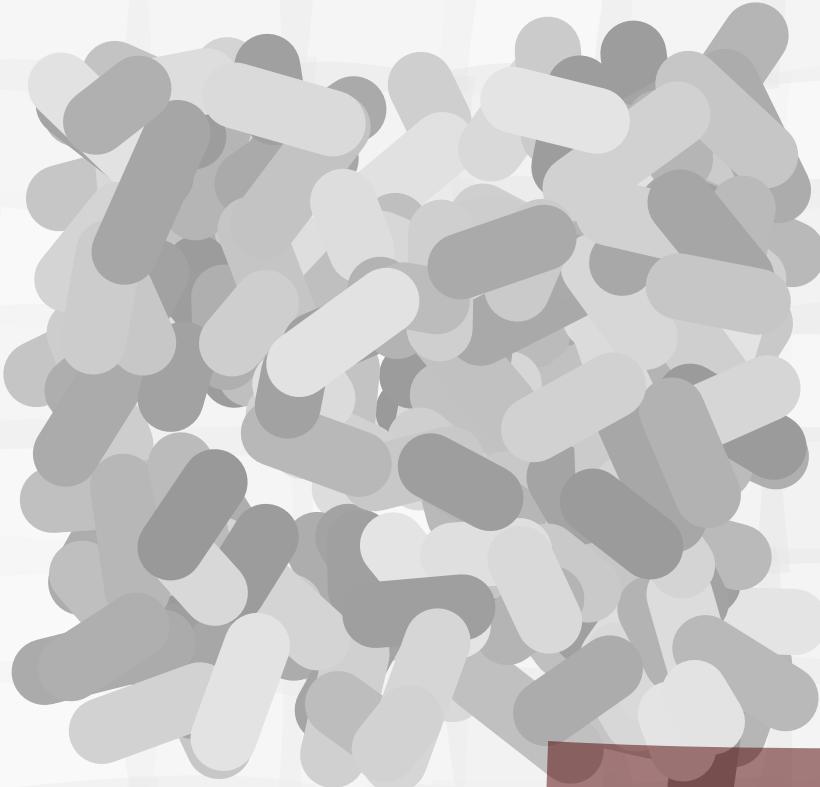
In 2023, in the perspective of the LuaMeta<sup>T</sup>EX project, we glued MetaPost, Lua, T<sub>E</sub>X and Po-trace. Because we also improved the math machinery this years graphic reflects both efforts. We also made a matching game of it and the small graphic is one of the (possible) pieces.



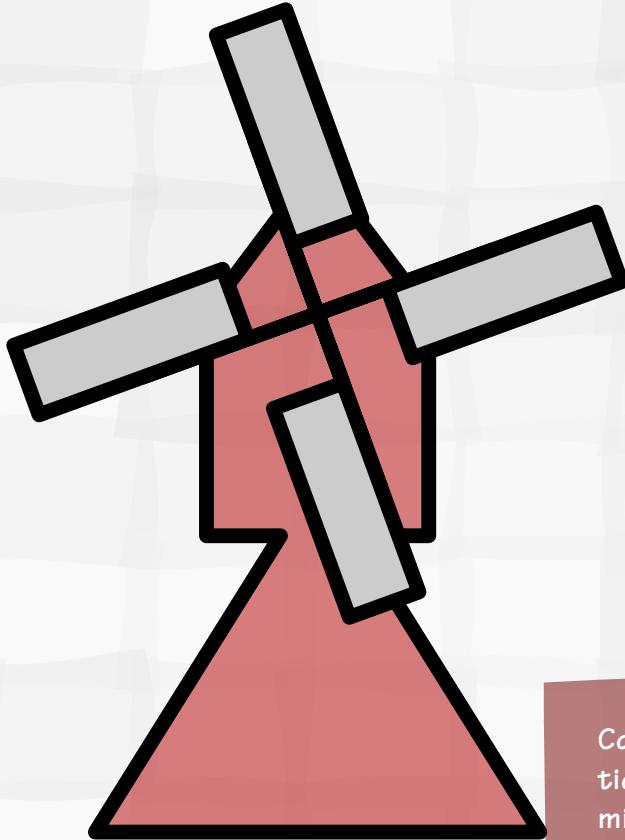
In 2001 the Dutch Speaking TeX User group composed a cdrom with all issues of their journal. The cdrom comes with abstracts and an index in the form of an interactive pdf document. Here you see how the cdrom looked like.



This counter was used in an invitation card for Volker ambassador of Dante e.V. Schaa's 50th birthday party. The text was typeset in Palatino, one of Zapfs fonts, Hermann Zapf being one of Volkers favorite designers. Each invitation was unique due to MetaPost random generator. The colors run from greenish to blueish in fifty steps.



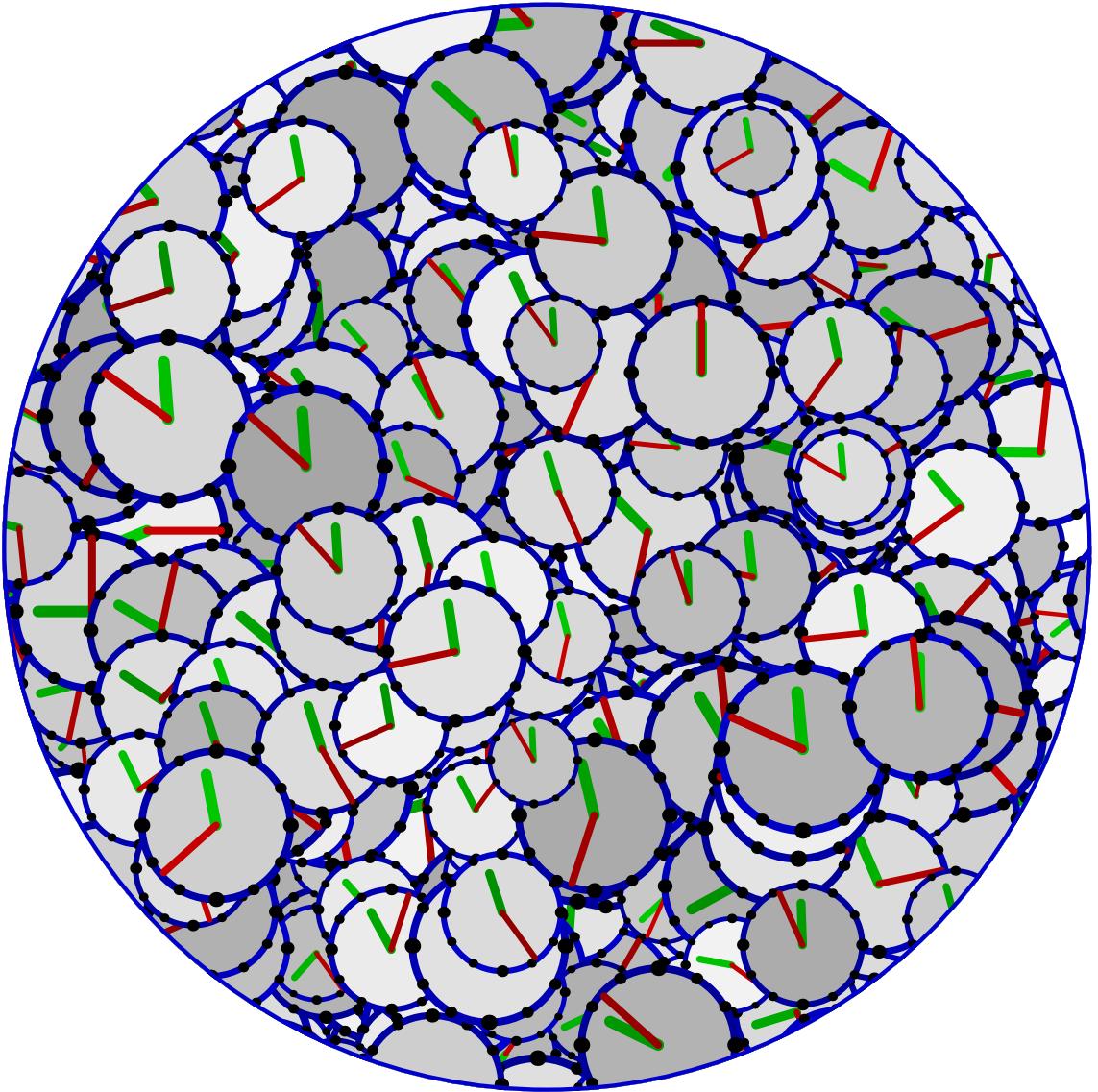
*This is the first of a series of cdrom covers that we use at Pragma ADE. A certain amount of simple manual labour is compensated by the complicated graphic.*



ConTeXt comes from the Netherlands, and traditionally this small country is associated with wind mills. These look like this. We use quite some transparencies here so you can imagine that it takes some time to render this picture on a printer.

ADE, Riddersstraat 27, 8006 GH Hasselt NL.

Het grote aftellen begint. Nog ruim 350 keer



zonder al te veel aftelproblemen. Pragma

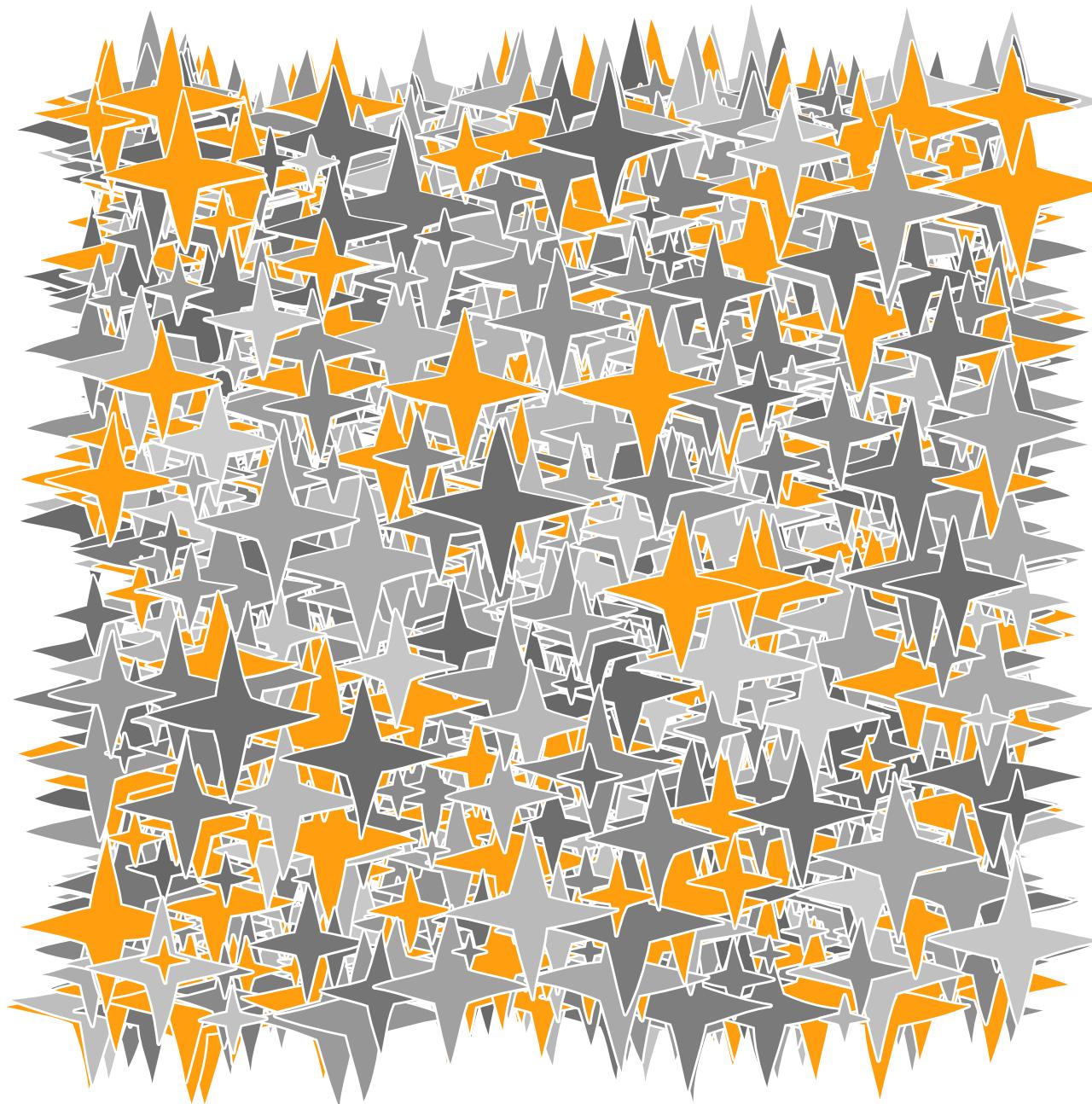
klokje rond. Wij wensen een vrolijk 1999,



Een ding is zeker,  
tijdens de overgang  
naar het nieuwe  
millennium zullen  
bij ons de kaarsen  
blijven branden.

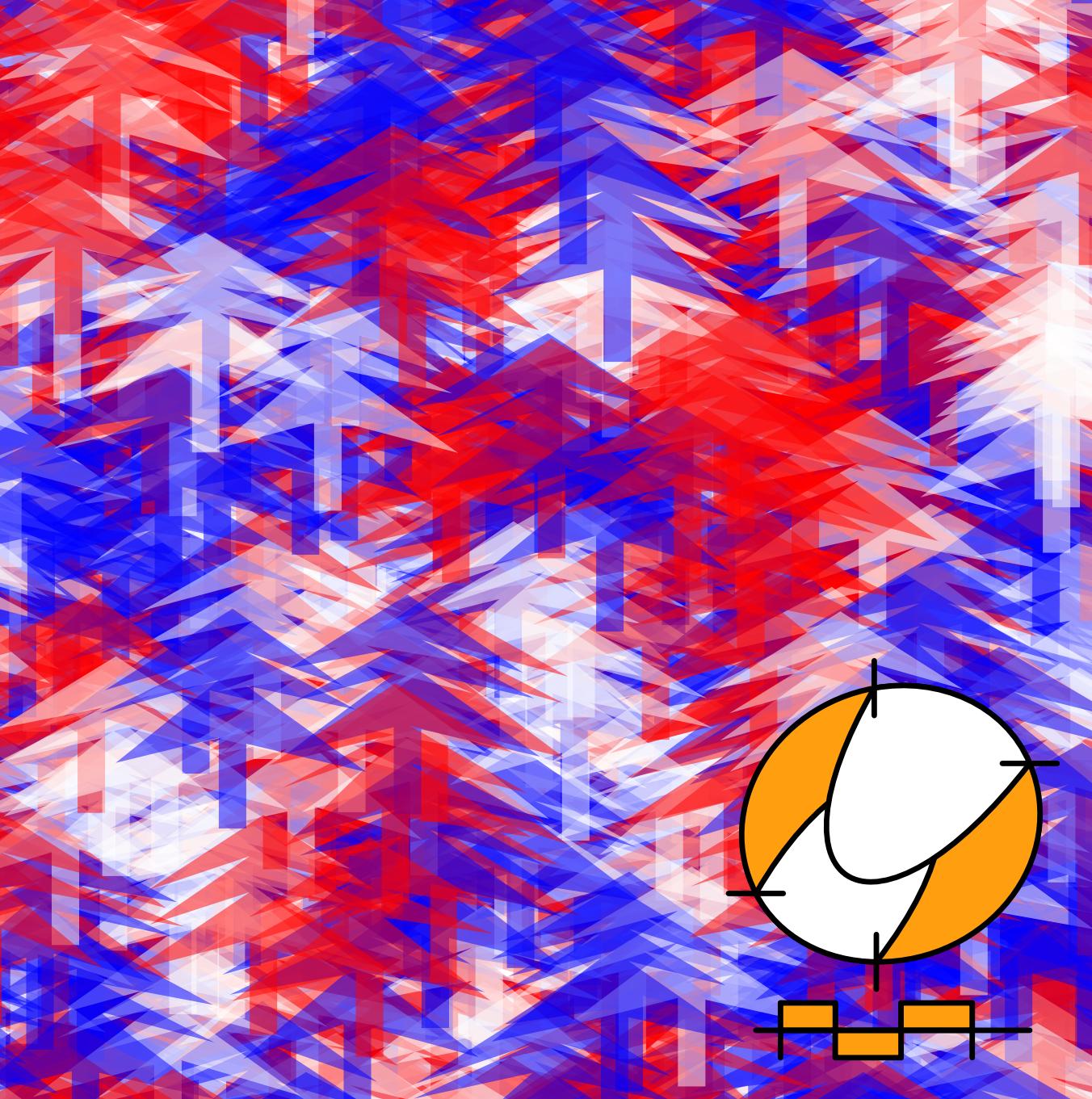
Wij wensen u een  
goede 21<sup>e</sup> eeuw toe.

PRAGMA ADE  
Ridderstraat 27  
8061GH Hasselt NL  
  
+31 38 477 53 69  
[www pragma-ade nl](http://www pragma-ade nl)



Wij wensen u  
een sterk 2001!

PRAGMA ADE  
Ridderstraat 27  
8061GH Hasselt NL  
  
+31 38 477 53 69  
[www.pragma-ade.com](http://www.pragma-ade.com)



Wij hopen dat u in  
2002 door de bomen  
het bos blijft zien!

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Ridderstraat 27  
8061GH Hasselt NL

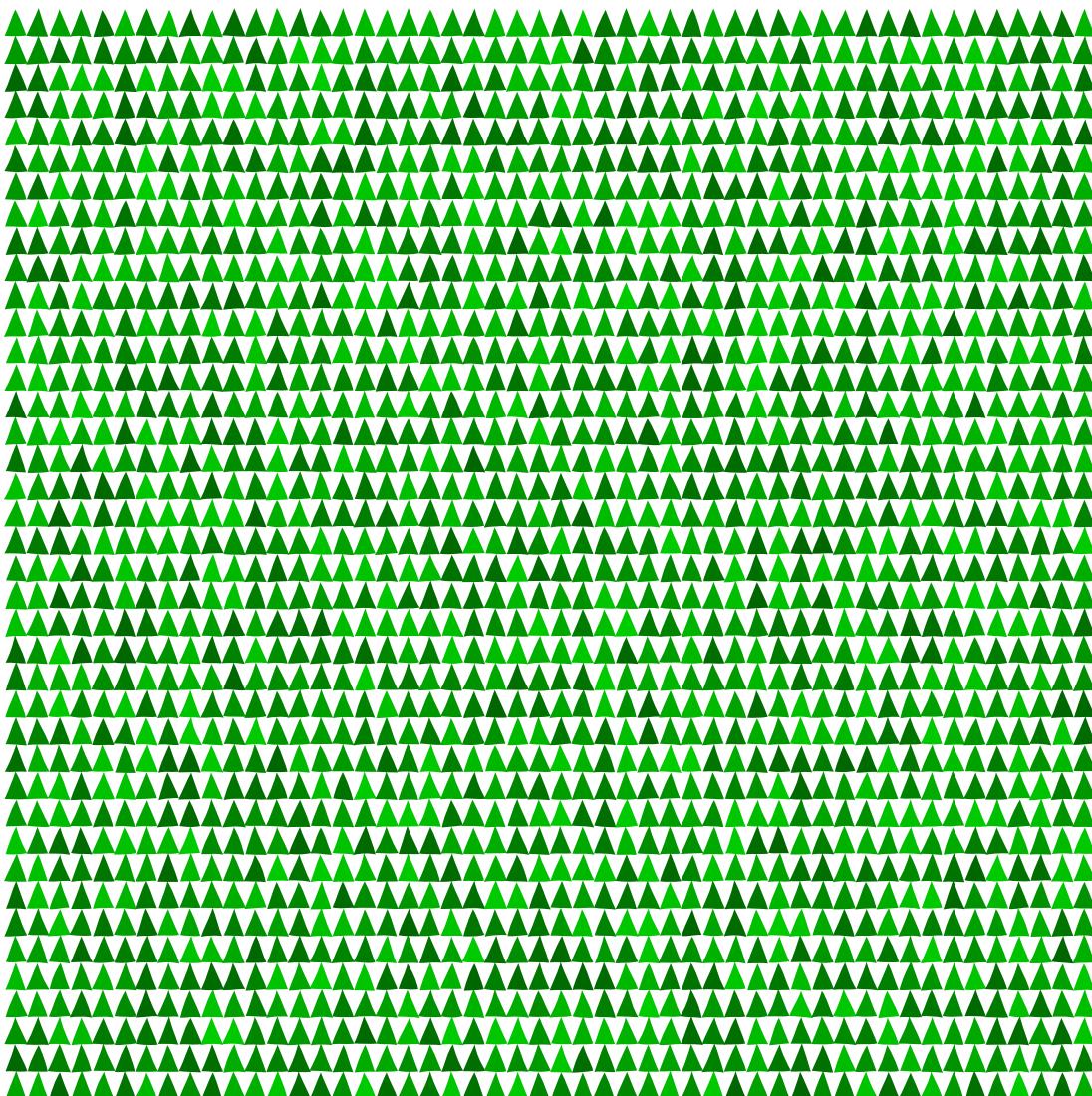
+31 (0)38 477 53 69  
[www.pragma-ade.com](http://www.pragma-ade.com)  
[www.pragma-pod.nl](http://www.pragma-pod.nl)



Wij wensen u  
een prettig en  
gezond 2003.

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[www.pragma-ade.com](http://www.pragma-ade.com)  
[www.pragma-pod.com](http://www.pragma-pod.com)

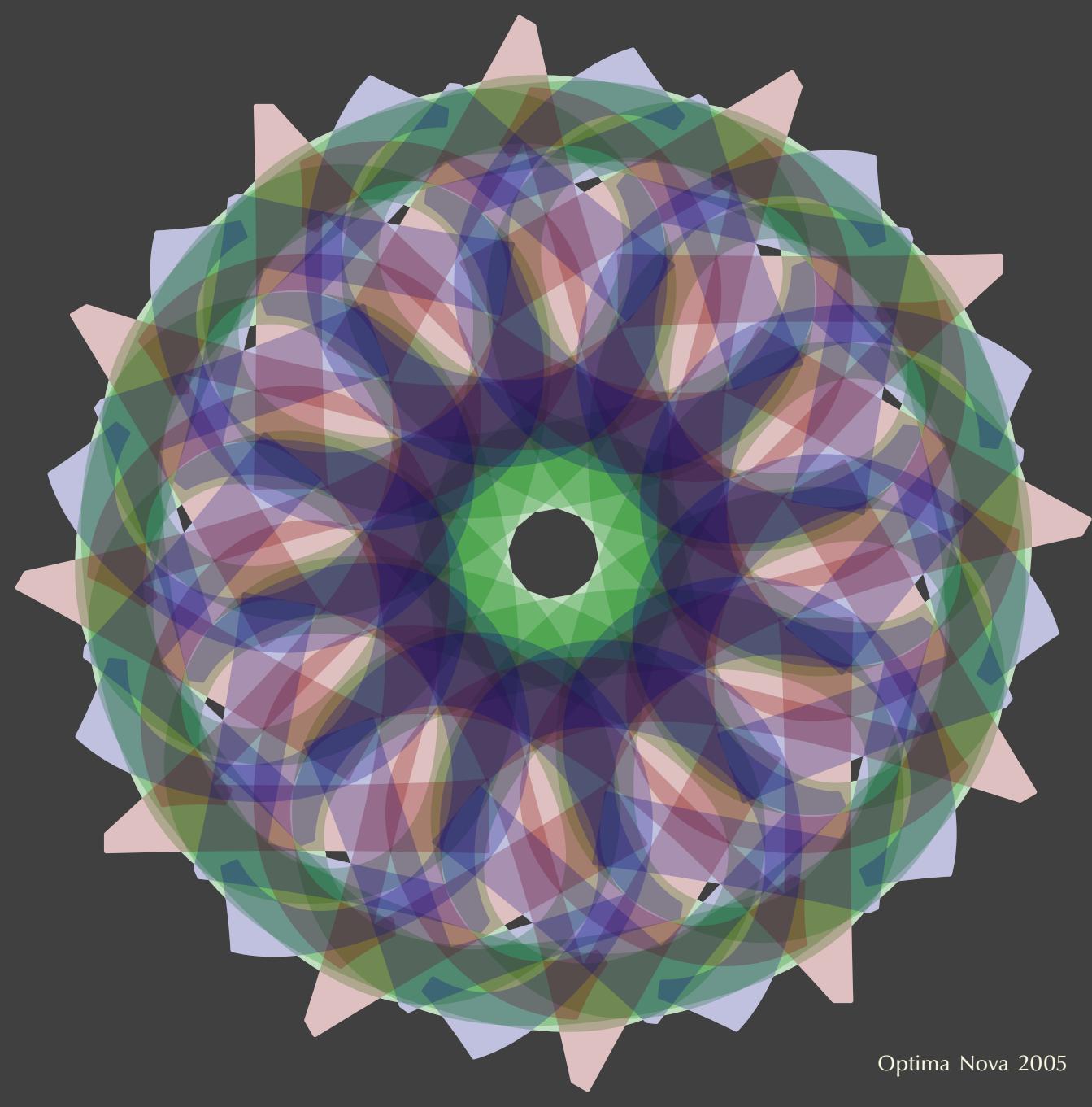


Wij wensen u  
een gezond  
en voorspoedig



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[www.pragma-pod.com](http://www.pragma-pod.com)



Wij wensen u  
een optimaal  
nieuw jaar.

Hans Hagen  
Ton Otten

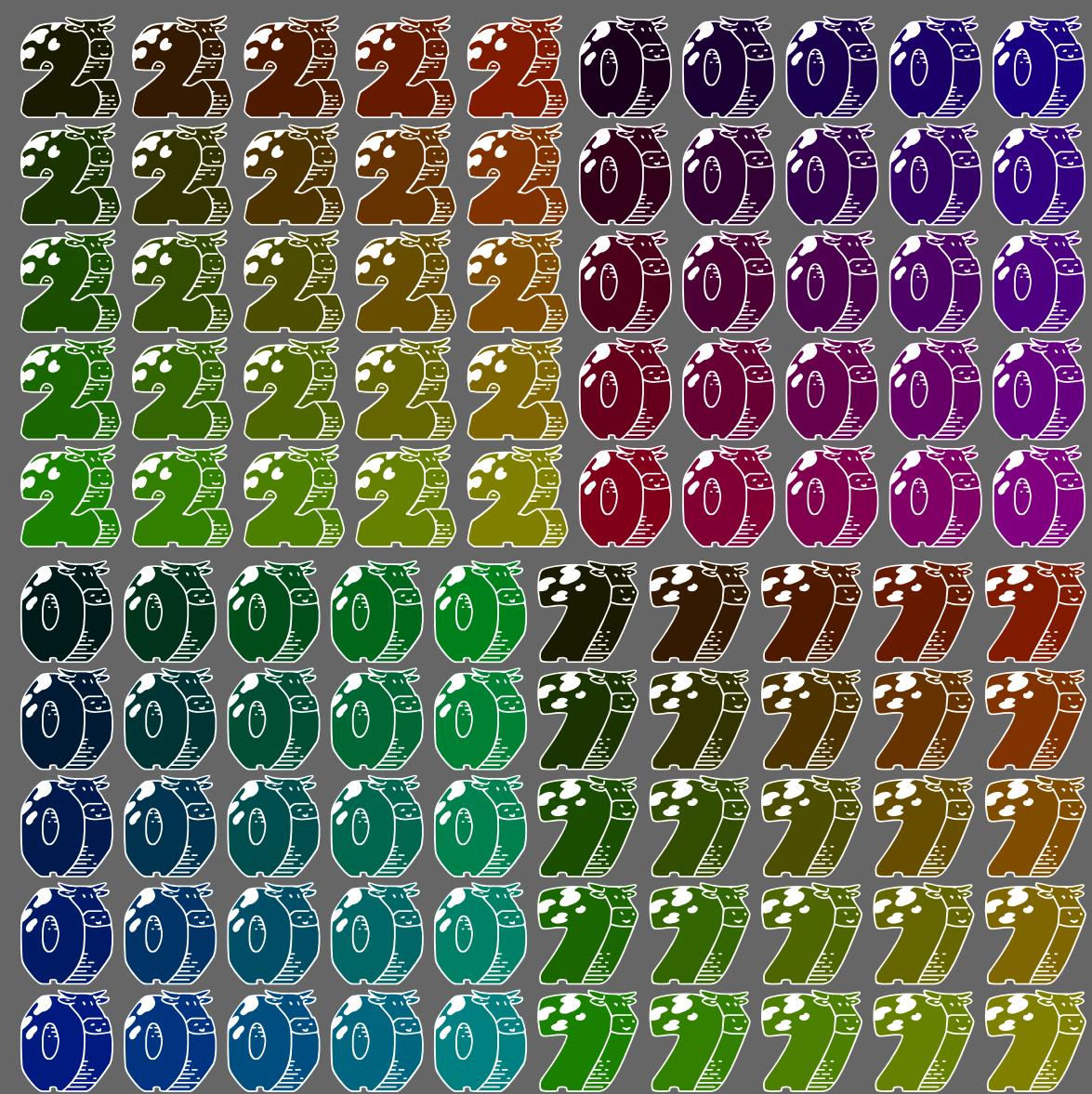
Optima Nova 2005

[www.pragma-ade.com](http://www.pragma-ade.com)

Wij wensen u  
een prettig  
MMVI.

Hans Hagen  
Ton Otten

[www.pragma-a.de.com](http://www.pragma-a.de.com)



ଦୀନ  
ପ୍ରକାଶକ  
ବ୍ୟାପାର  
ପ୍ରେସିଂ  
କୋମି.

ମାନ୍ୟ  
ମାର୍ଗେଣ୍ଡ

ଫୋନ୍  
ପ୍ରକାଶକ



Wij wensen u een overzichtelijk 2008 toe.

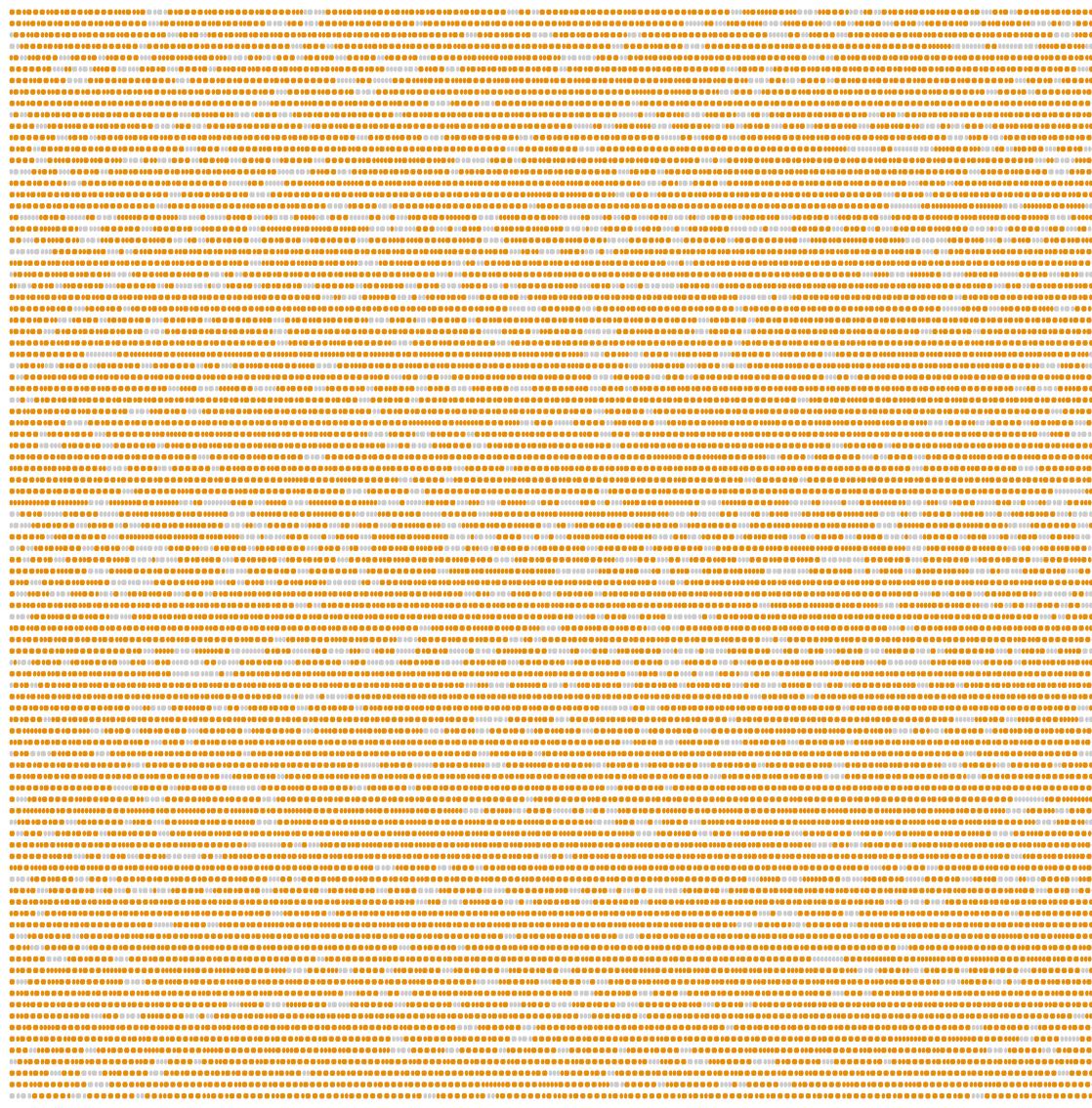
LET'S HOPE THAT 2009 WILL NOT BECOME A MESS!

PRAGMA ADE, RUPPENSTRAAT 21, 3000 GHENT, BELGIUM, [www.pragmaade.com](http://www.pragmaade.com)

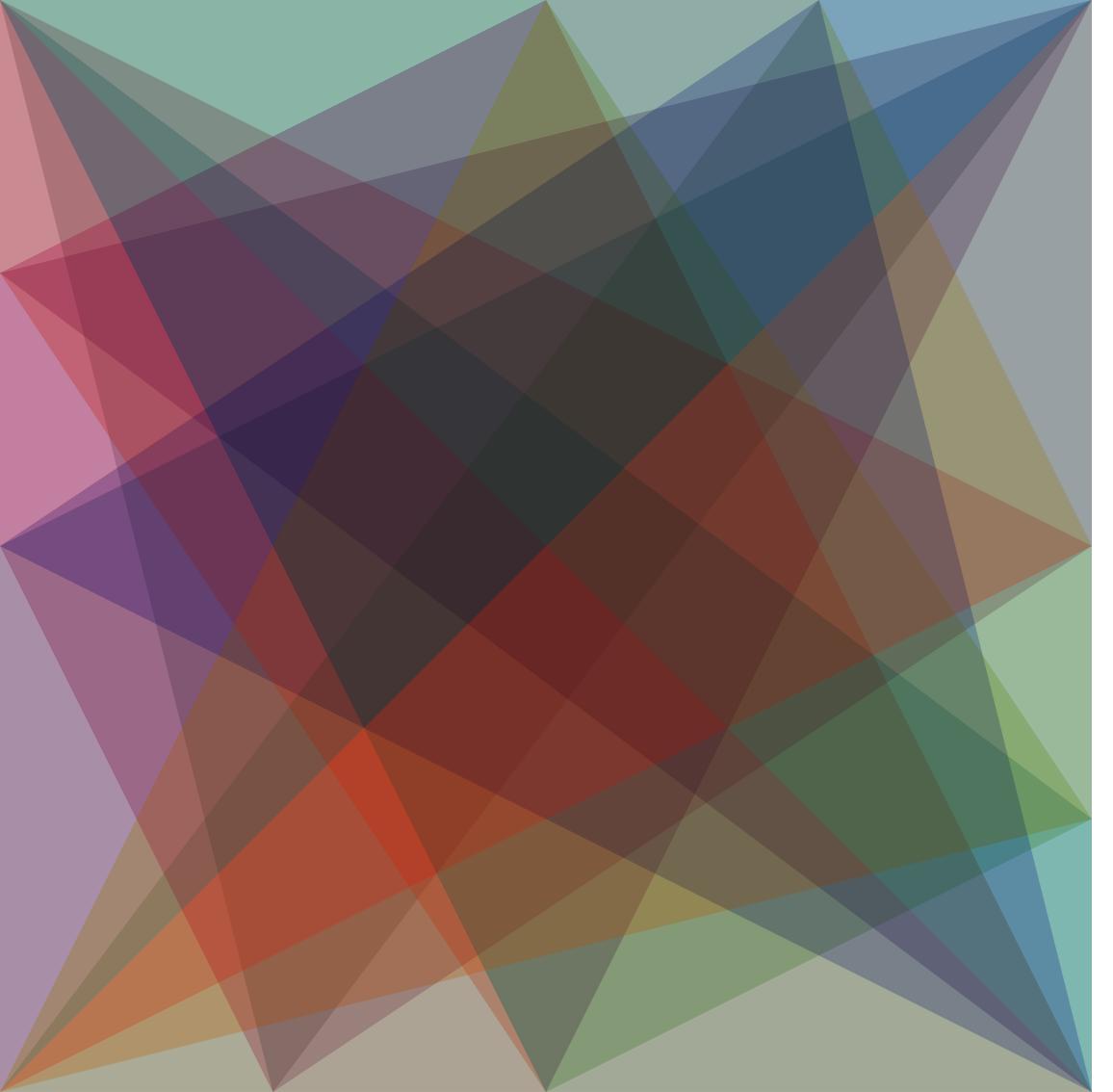




We wish you a lucky 2012!



We wish you a crisis-free 2013.

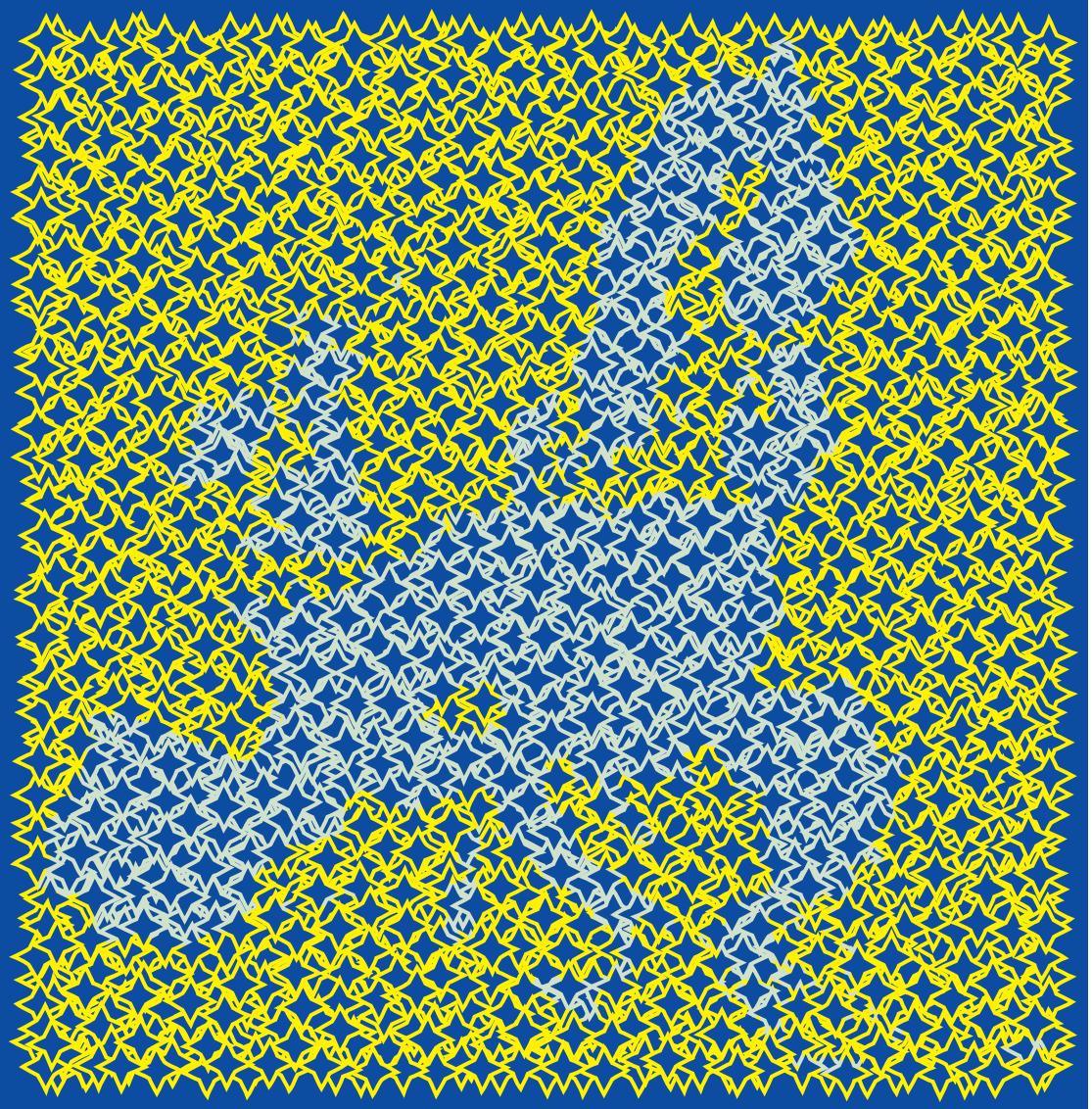


We wish you a colorful 2014!

Pragma ADE, Riddersstraat 27, 8061 GH Hasselt NL, [www.pragma-ade.com](http://www.pragma-ade.com)

We wish you a clear 2015!

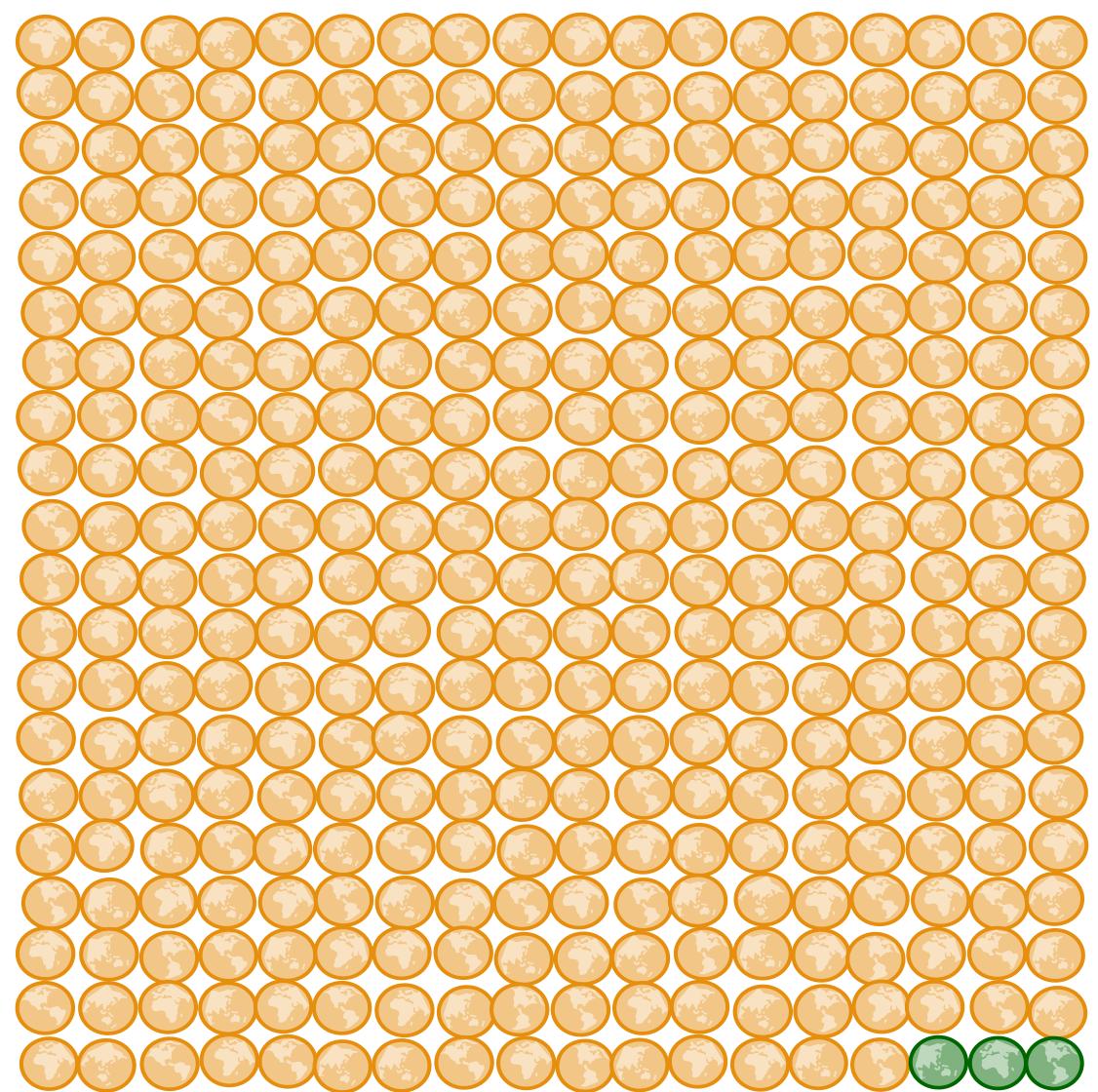
We wish you a peaceful 2016!

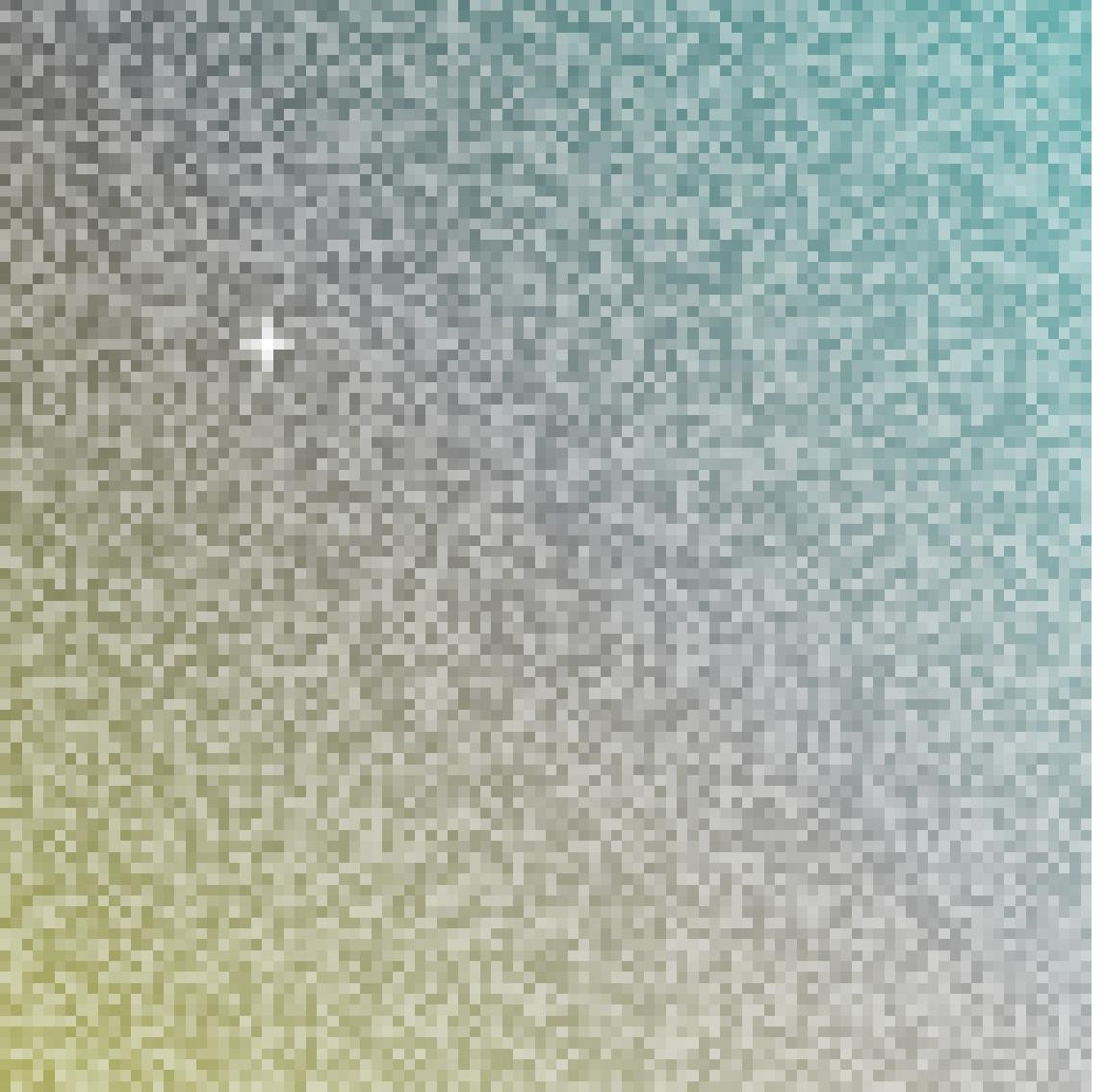


We wish you a constructive 2017!

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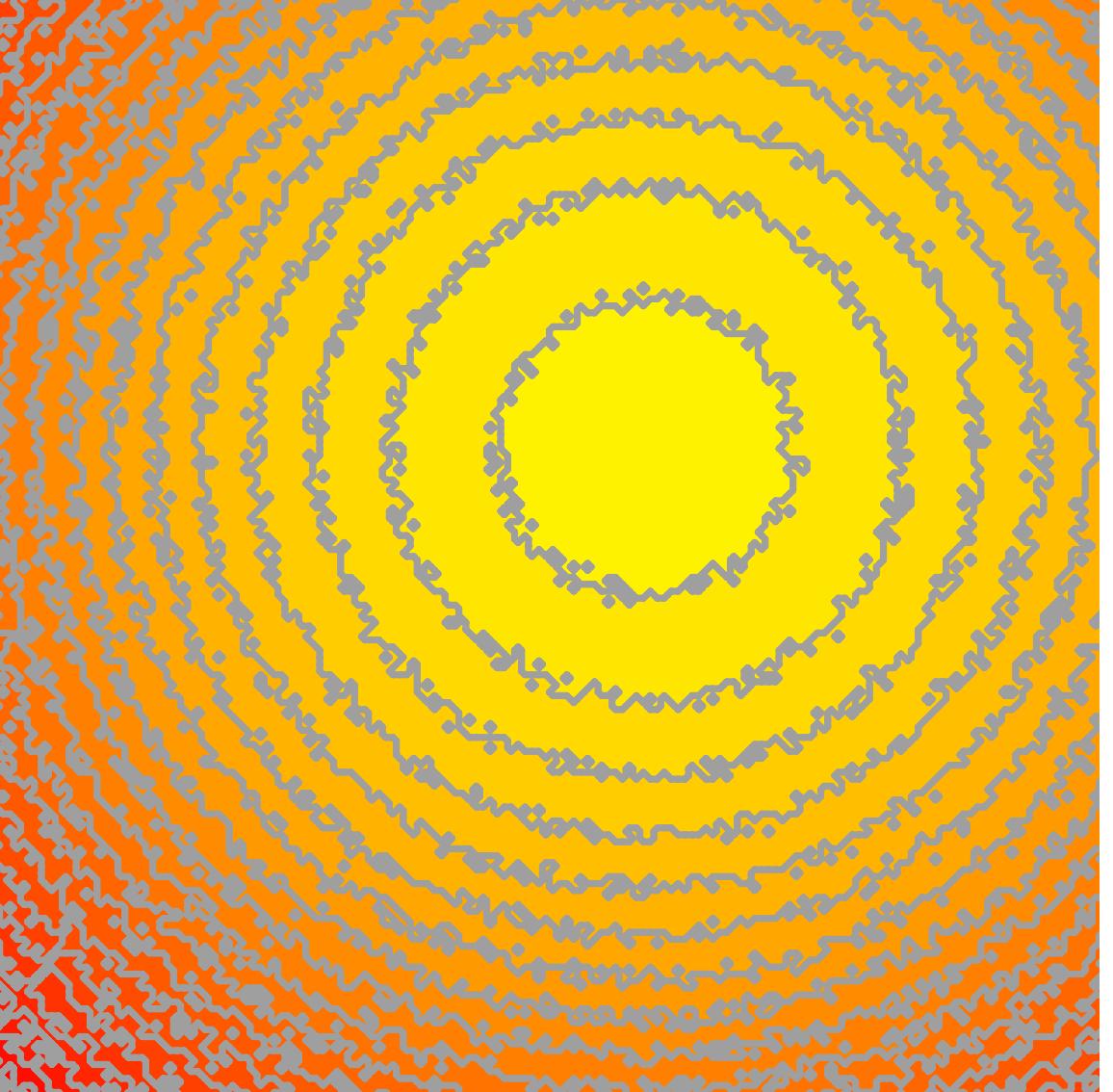
We wish you a green 2018!





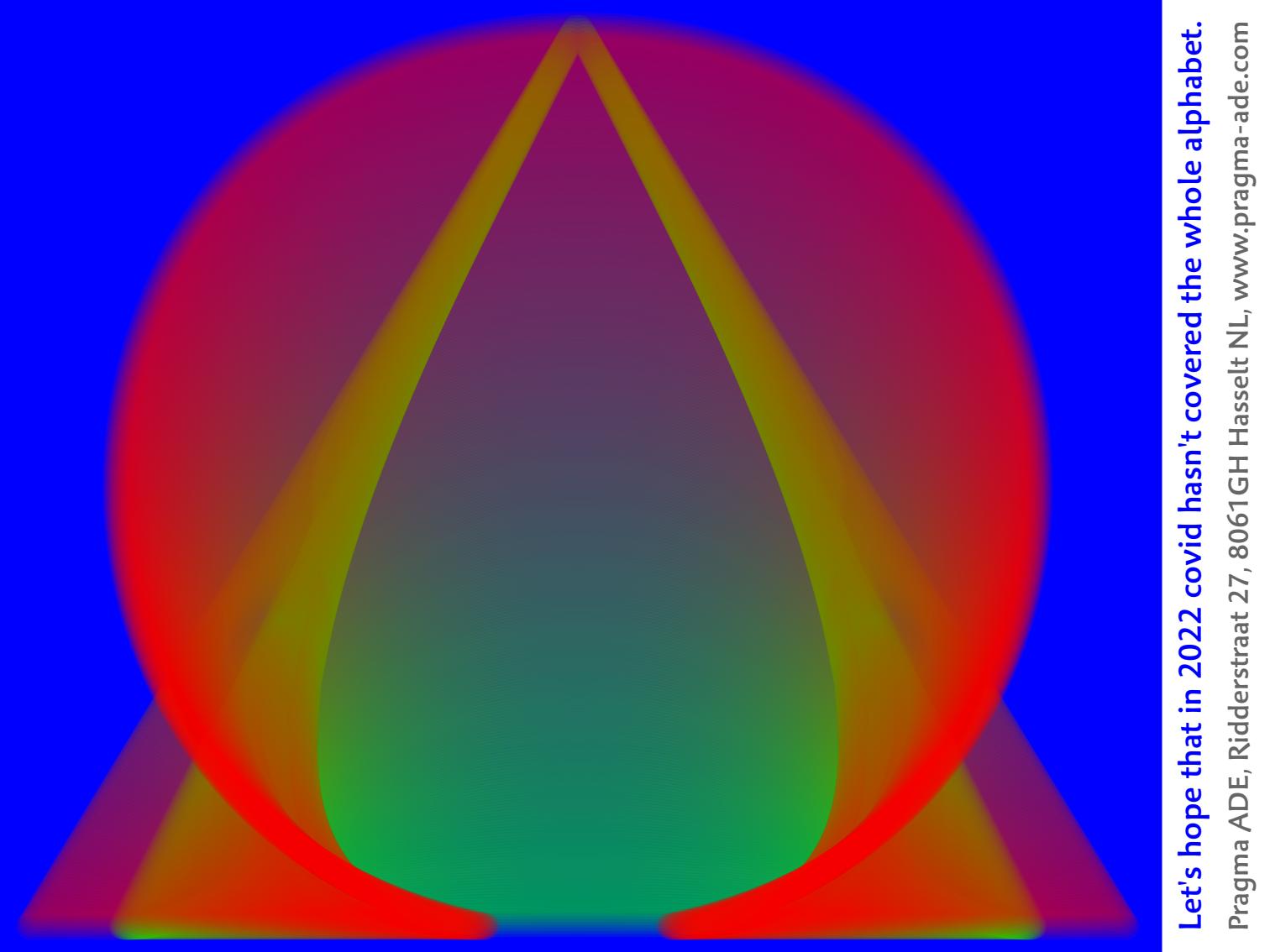
Let 2019 be the year we secure our unique place in the universe!

Pragma ADE, Ridderstraat 27, 8061 GH Hasselt NL, [www.pragma-ade.com](http://www.pragma-ade.com)

The background features a central yellow circle surrounded by several concentric, wavy grey lines. These lines are set against a background that transitions from orange at the top and bottom to yellow in the center. The overall effect is organic and dynamic.

We wish you an unpredictable and unique 2020.

Pragma ADE, Riddersstraat 27, 8061GH Hasselt NL, [www.pragma-ade.com](http://www.pragma-ade.com)



**Let's hope that in 2022 covid hasn't covered the whole alphabet.**

Pragma ADE, Ridderstraat 27, 8061 GH Hasselt NL, [www.pragma-ade.com](http://www.pragma-ade.com)

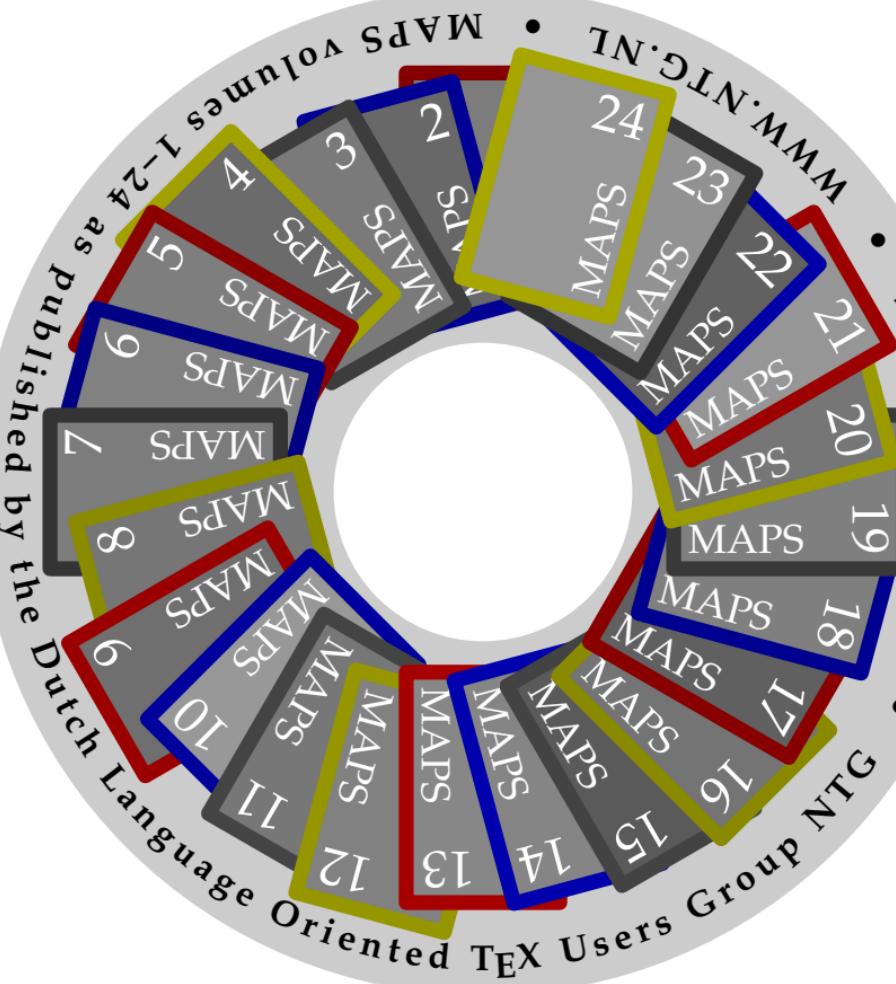
**Let's hope that 2023 comes full circle.**

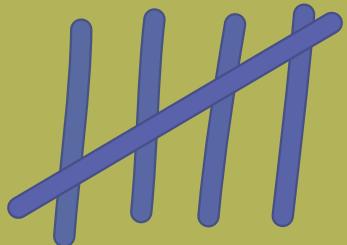
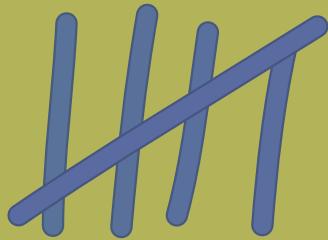
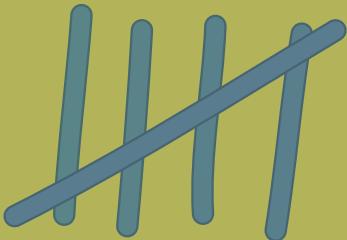
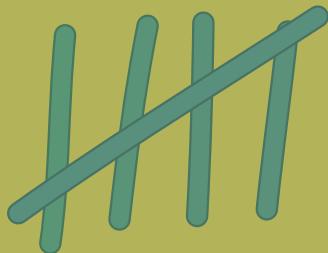
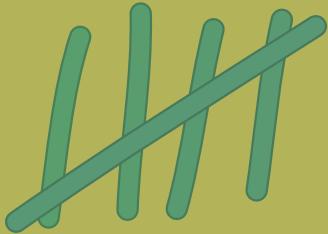
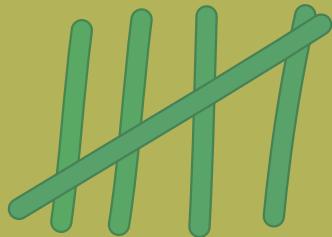
Pragma ADE, Ridderstraat 27, 8061 GH Hasselt NL, [www.pragma-aade.nl](http://www.pragma-aade.nl)

**Let's hope that in 2024 history doesn't repeat itself.**

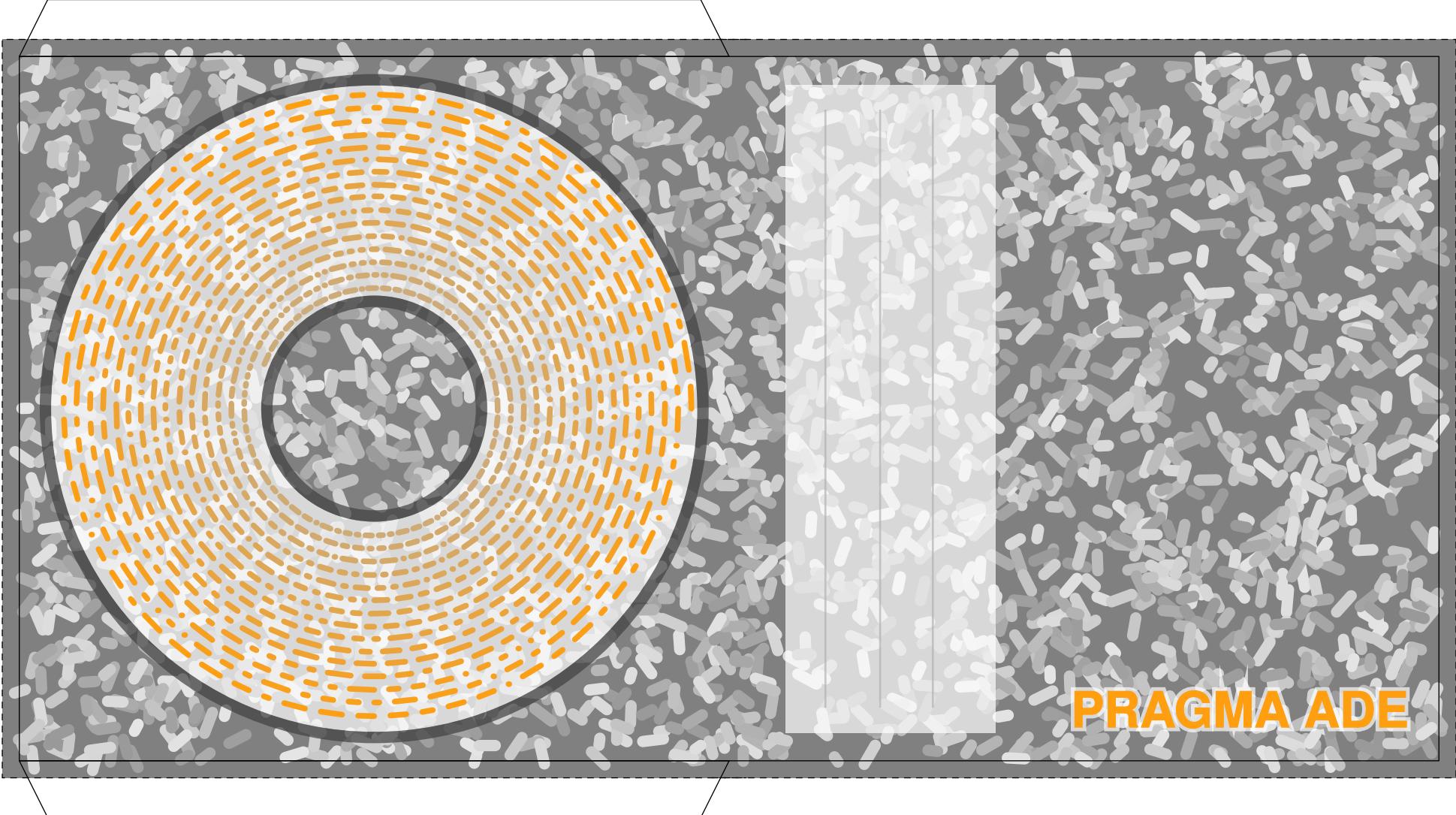
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Es ist so weit: ich werde 50! • Das ist Grund genug zu feiern und zwar bei einem französi schen Essen • Am Samstag, dem 18. Mai 2002 ab 18:00 Uhr beim STADT-KOCH Heidelberger straße 105 in Darmstadt • Ich freue mich, wenn Ihr kommt • Bitte sagt mir bis zum 7. April Bescheid • Herzliche Grüße, Euer Volker



**PRAGMA ADE**

