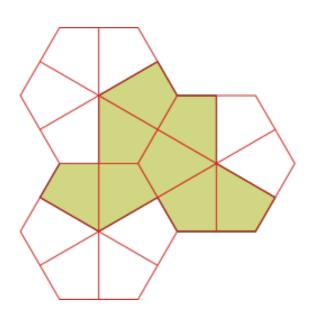
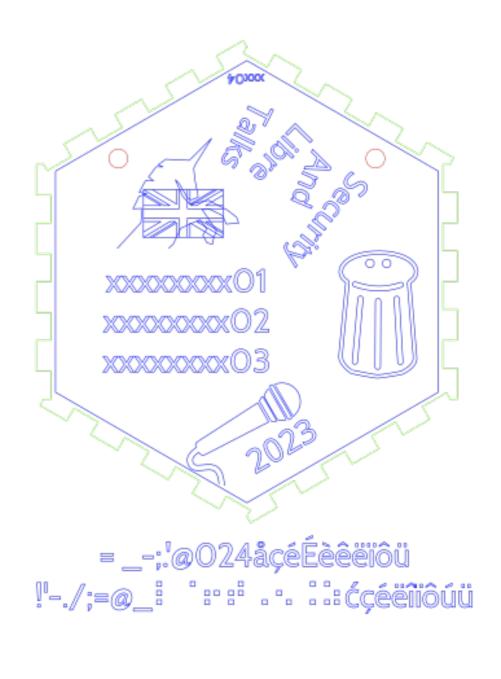
# Badge story













**Export Pretix orders** 

Extract fields

Choose a laser-friendly font

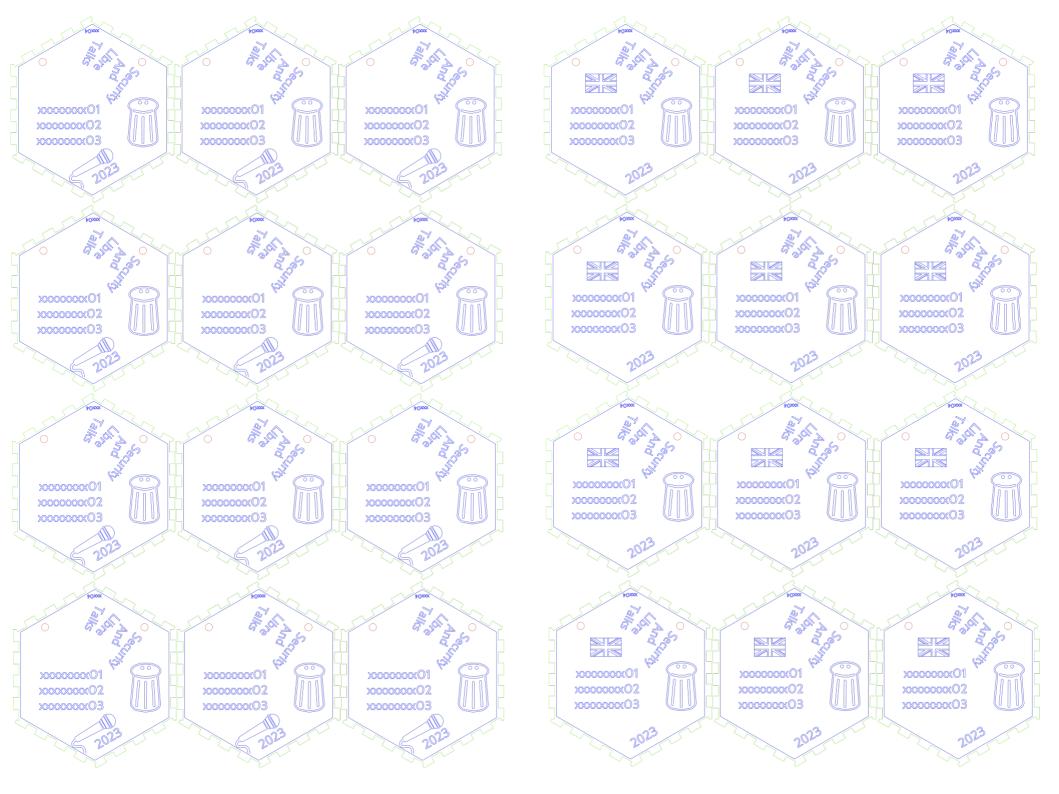
Check UTF8/Symbols rendering?

SVG template → Python script → rendered badges

Check manually for long fields

Sort by registration code

Files, scripts & processes: https://www.thingiverse.com/doegox/designs

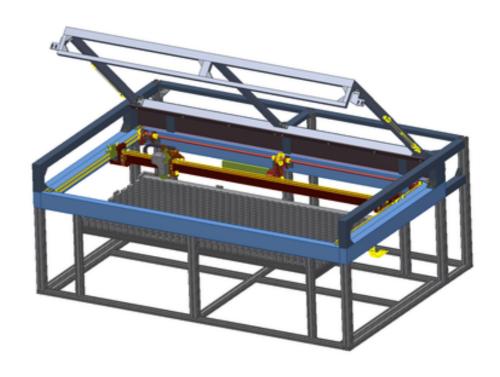




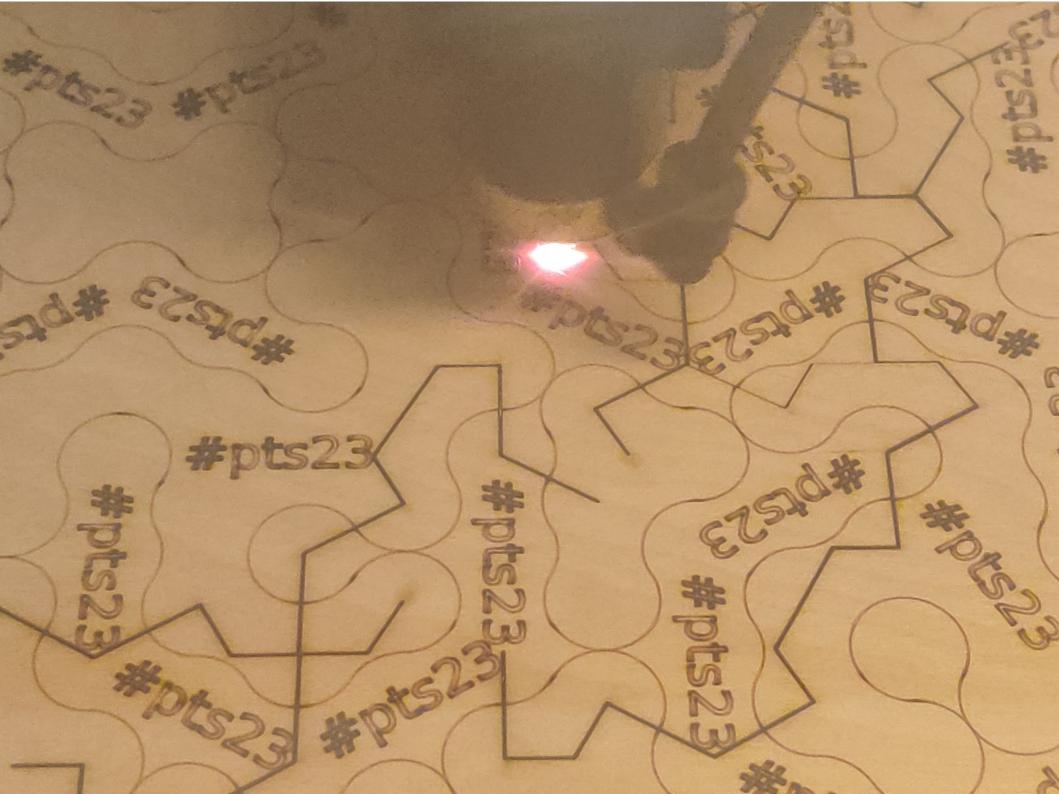
### Opensource hardware...

# Lasersaur with OpenBuilds BlackBox Motion Control System









# Einstein problem

"ein Stein" is German for "one stone"
In plane geometry, the einstein problem asks about the existence of [...]
a shape that can tessellate space but only in a nonperiodic way

Wikipedia

#### **Mathematics > Combinatorics**

[Submitted on 20 Mar 2023 (v1), last revised 29 May 2023 (this version, v2)]

#### An aperiodic monotile

David Smith, Joseph Samuel Myers, Craig S. Kaplan, Chaim Goodman-Strauss

A longstanding open problem asks for an aperiodic monotile, also known as an "einstein": a shape that admits tilings of the plane, but never periodic tilings. We answer this problem for topological disk tiles by exhibiting a continuum of combinatorially equivalent aperiodic polygons. We first show that a representative example, the "hat" polykite, can form clusters called "metatiles", for which substitution rules can be defined. Because the metatiles admit tilings of the plane, so too does the hat. We then prove that generic members of our continuum of polygons are aperiodic, through a new kind of geometric incommensurability argument. Separately, we give a combinatorial, computer-assisted proof that the hat must form hierarchical -- and hence aperiodic -- tilings.

89 pages, 57 figures; Minor corrections, renamed "fylfot" to "triskelion", added the name "turtle", added references, new H7/H8 rules (Fig 2.11), talk about Comments:

reflections

Subjects: Combinatorics (math.CO); Discrete Mathematics (cs.DM); Metric Geometry (math.MG)

MSC classes: 05B45, 52C20 (Primary) 05B50 (Secondary)

ACM classes: F.2.2; G.2.1

Cite as: arXiv:2303.10798 [math.CO]

(or arXiv:2303.10798v2 [math.CO] for this version)

https://doi.org/10.48550/arXiv.2303.10798

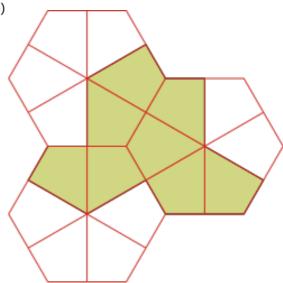


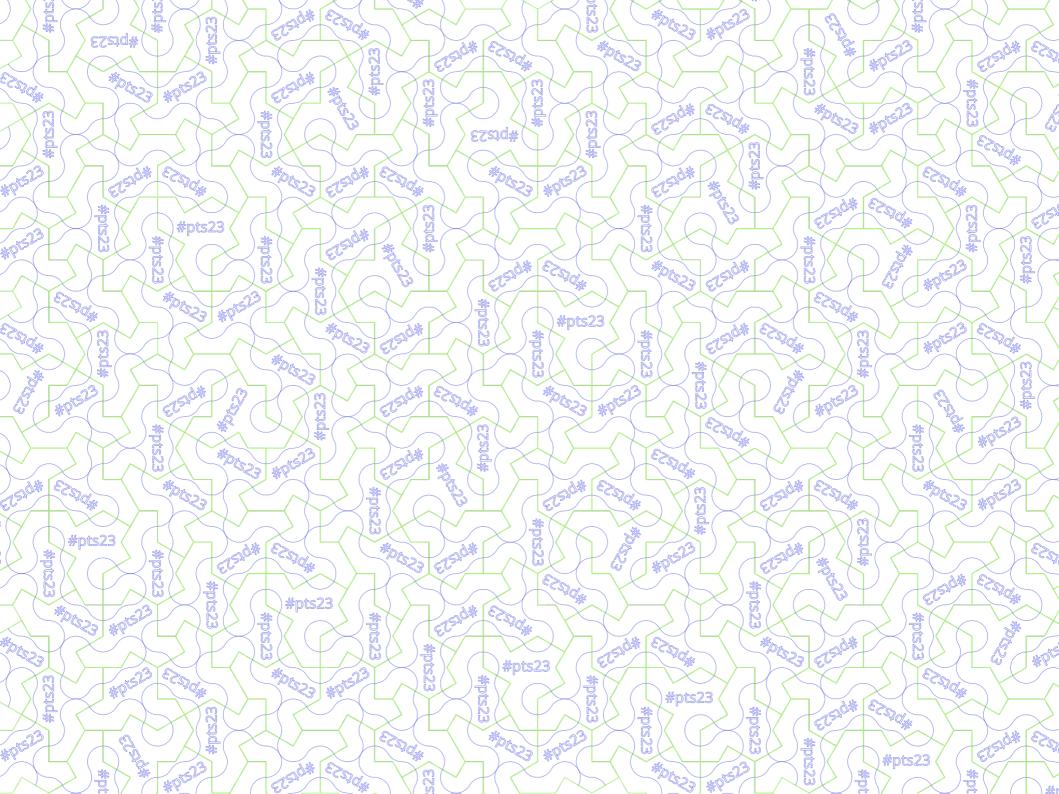
#### **Submission history**

From: Craig Kaplan [view email]

[v1] Mon, 20 Mar 2023 00:05:30 UTC (8,550 KB)

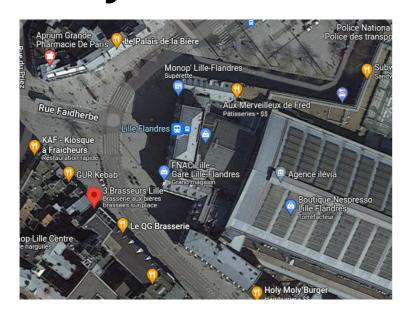
[v2] Mon, 29 May 2023 16:18:31 UTC (4,358 KB)





### Social event

### Today 19h at « 3 brasseurs »





Badge is required!

Tokens are welcome...

