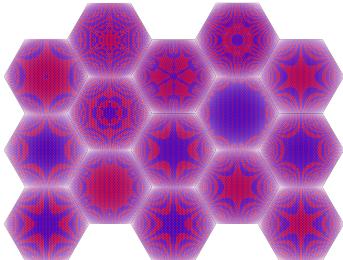


Pensieve header: This is the main Mathematica package that goes along with my talk “The Strongest Genuinely Computable Knot Invariant Since 2024” at the First International On-line Knot Theory Congress.

```
In[1]:= SetDirectory["C:\\drorbn\\AcademicPensieve\\Talks\\KnotTheoryCongress-2502"];
```

```
In[2]:= BeehiveImages =
  Import["C:\\drorbn\\AcademicPensieve\\Projects\\HigherRank\\DunfieldKnots\\PP" <>
    ToString[#] <> ".png"] & /@ (100 + Range[15]);
Show[Beehive = Graphics[{{
      {0, 0, 1}, {1, 0, 2}, {2, 0, 3}, {0, 1, 4}, {1, 1, 5}, {2, 1, 6}, {-1, 2, 7}, {0, 2, 8},
      {1, 2, 9}, {-1, 3, 10}, {0, 3, 11}, {1, 3, 12}, {-2, 4, 13}, {-1, 4, 14}, {0, 4, 15}
    },
    PlotRange -> {{-0.6, 4.1}, {-0.5, 3}}, ImageSize -> 1200] /. {x_, y_, k_} :>
    Inset[
      SetAlphaChannel[BeehiveImages[[k]], Graphics[{White,
        Polygon[Table[{Cos[t], Sin[t]}, {t, 0, 5 \[Pi]/3, \[Pi]/3}]]}], Background -> Black]],
    x {0, 1} + y {\sqrt{3}/2, 1/2}, Center, 1.2
  ], ImageSize -> Small]
```

Out[2]=



In[3]:= Export["Beehive.png", ImageCrop[Beehive]]

Out[3]=

Beehive.png