

GENEROVANÁ GRAFIKA



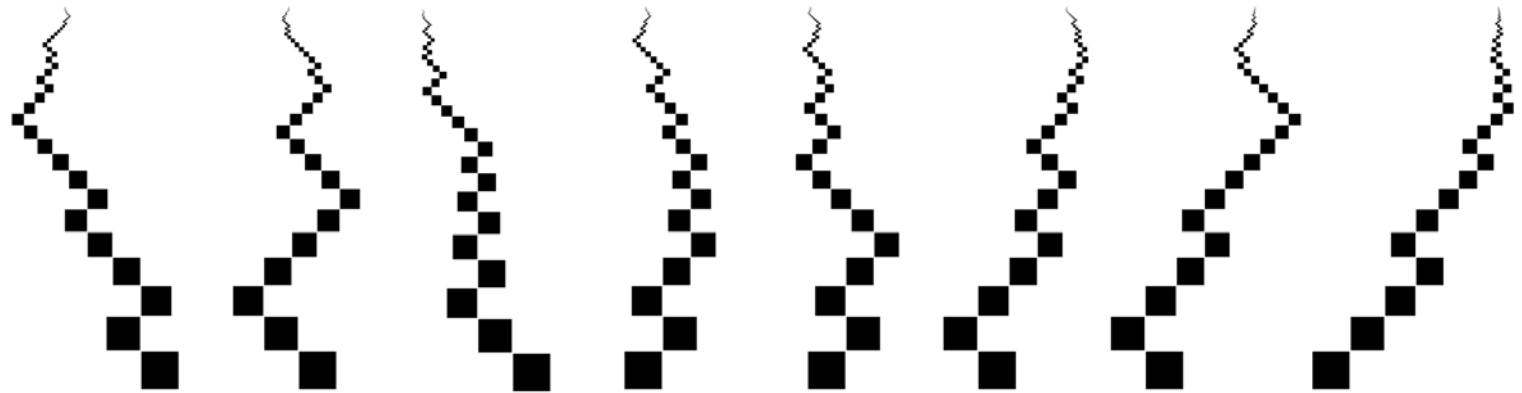
Teorie interaktivních médií

FF MU • 2008

Jednoduchý jazyk pro generování vizuálních struktur

- grafické symboly
- přepisovací pravidla
- náhodný výběr pravidel

```
startshape paint
rule paint {
  square{}
  paint { s 0.9 x 1 y 1 }
}
rule paint {
  square{}
  paint { s 0.9 x -1 y 1 }
}
```



<http://www.chriscoyne.com/cfdg/>

```
startshape FOREST
```

```
rule FOREST {  
  SEED {}  
  SEED {x -20}  
  SEED {x -40}  
}
```

```
rule SEED {BRANCH {}}  
rule SEED {BRANCH {rotate 1}}  
rule SEED {BRANCH {rotate -1}}  
rule SEED {BRANCH {rotate 2}}  
rule SEED {BRANCH {rotate -2}}  
rule SEED {FORK {}}
```

```
rule BRANCH {RIGHTBRANCH {}}  
rule BRANCH {LEFTBRANCH {}}
```

```
rule LEFTBRANCH {BLOCK {} LEFTBRANCH {y 0.885 rotate 0.1 size 0.99}}  
rule LEFTBRANCH {BLOCK {} LEFTBRANCH {y 0.885 rotate 0.2 size 0.99}}  
rule LEFTBRANCH {BLOCK {} LEFTBRANCH {y 0.885 rotate 4 size 0.99}}  
rule LEFTBRANCH {BLOCK {} FORK {}}
```

```
rule RIGHTBRANCH {BLOCK {} RIGHTBRANCH {y 0.885 rotate -0.1 size 0.99}}  
rule RIGHTBRANCH {BLOCK {} RIGHTBRANCH {y 0.885 rotate -0.2 size 0.99}}  
rule RIGHTBRANCH {BLOCK {} RIGHTBRANCH {y 0.885 rotate -4 size 0.99}}  
rule RIGHTBRANCH {BLOCK {} FORK {}}
```

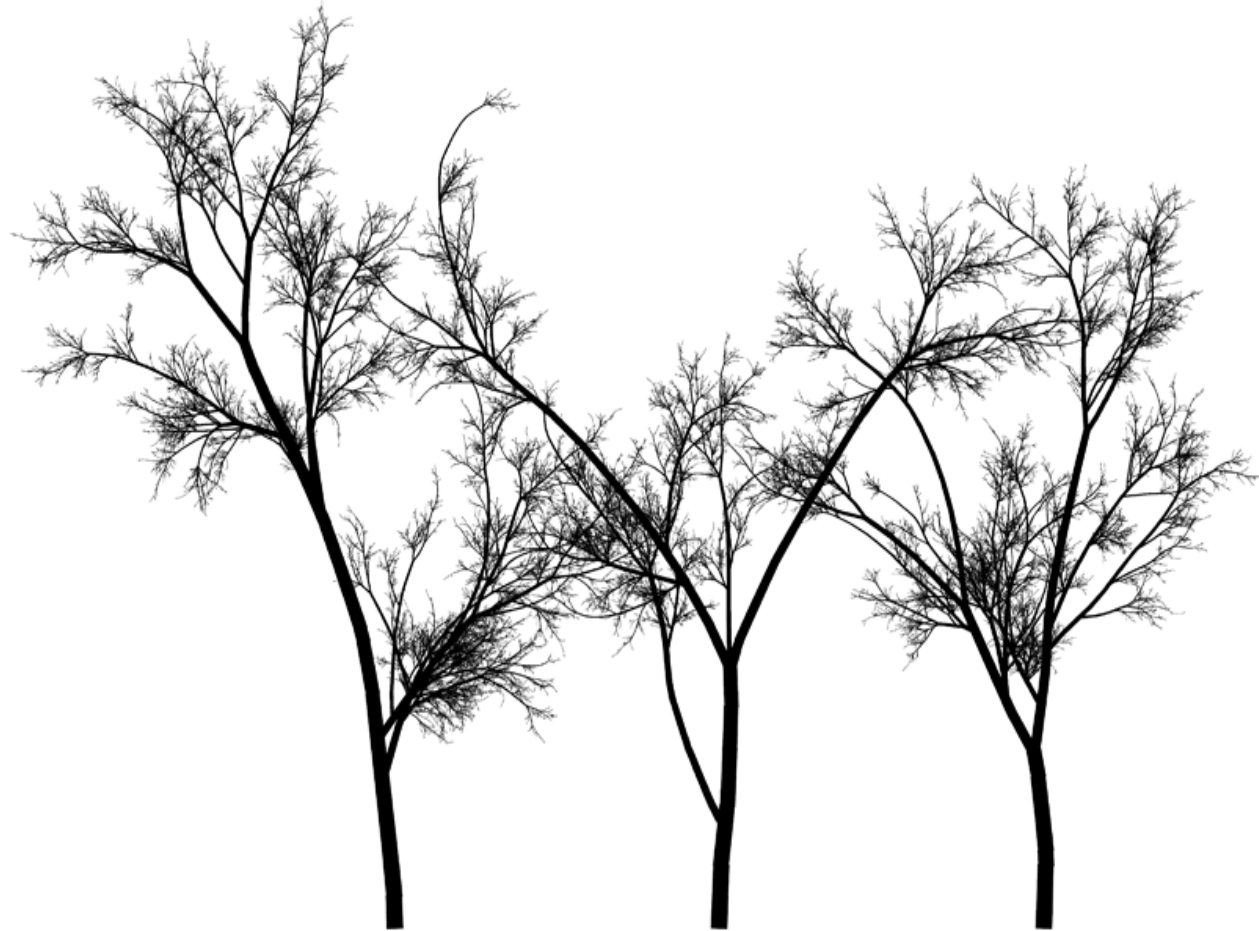
```
rule BLOCK {  
  SQUARE {rotate 1}  
  SQUARE {rotate -1}  
  SQUARE {}  
}
```

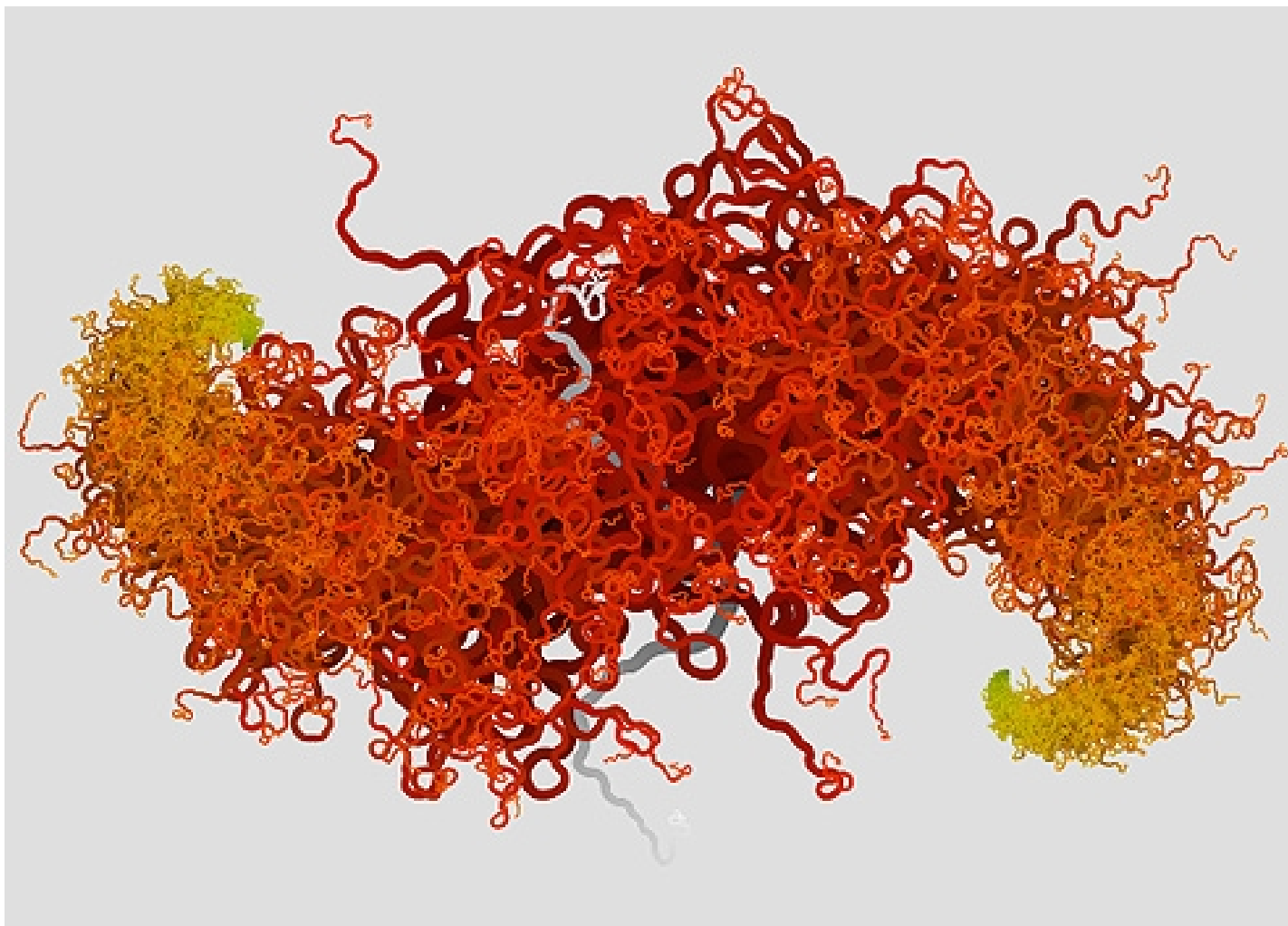
```
rule FORK {  
  BRANCH { }  
  BRANCH {size 0.5 rotate 40}  
}
```

```
rule FORK {  
  BRANCH { }  
  BRANCH {size 0.5 rotate -40}  
}
```

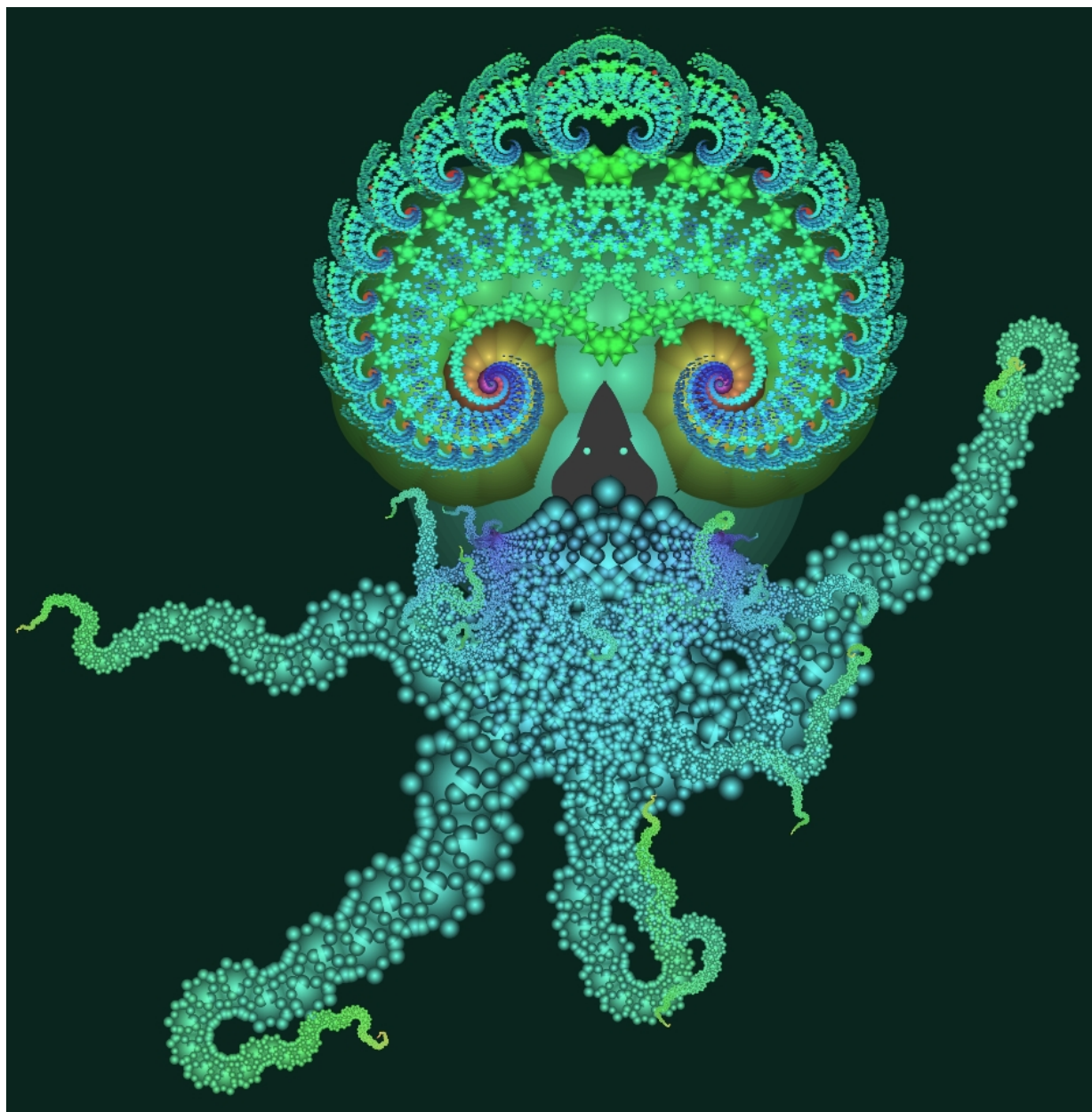
```
rule FORK {  
  BRANCH {size 0.5 rotate -20}  
  BRANCH { }  
}
```

```
rule FORK {  
  BRANCH {size 0.7 y 0.1 rotate 20}  
  BRANCH {size 0.7 y 0.1 rotate -20}  
}
```

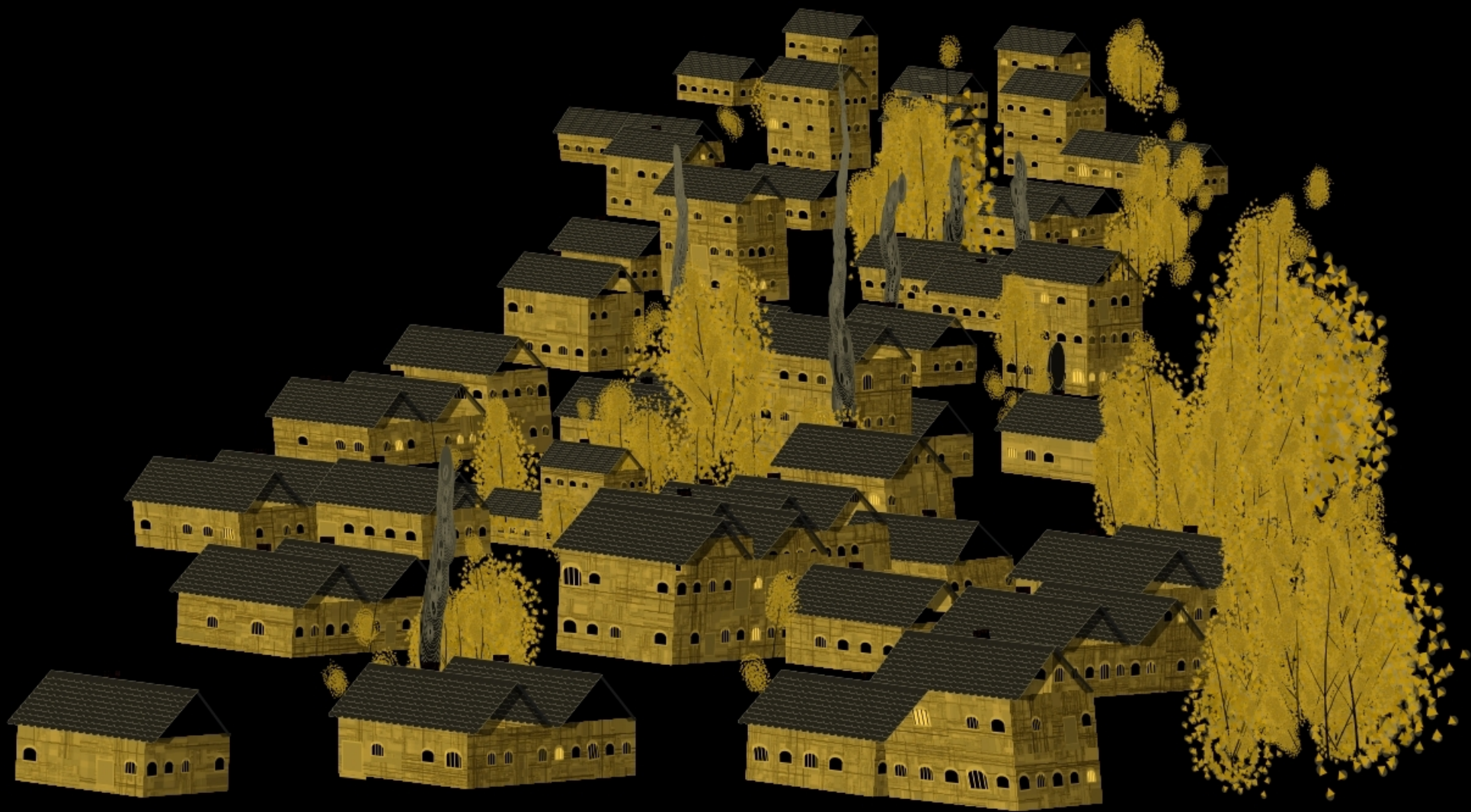


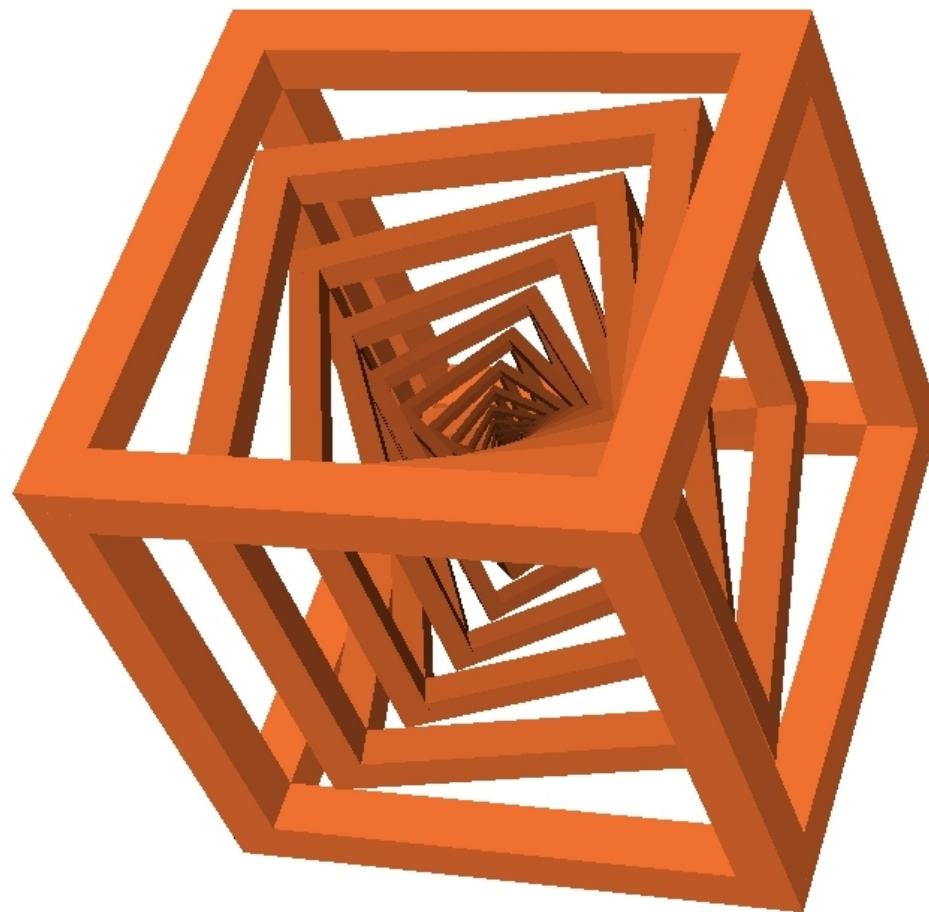




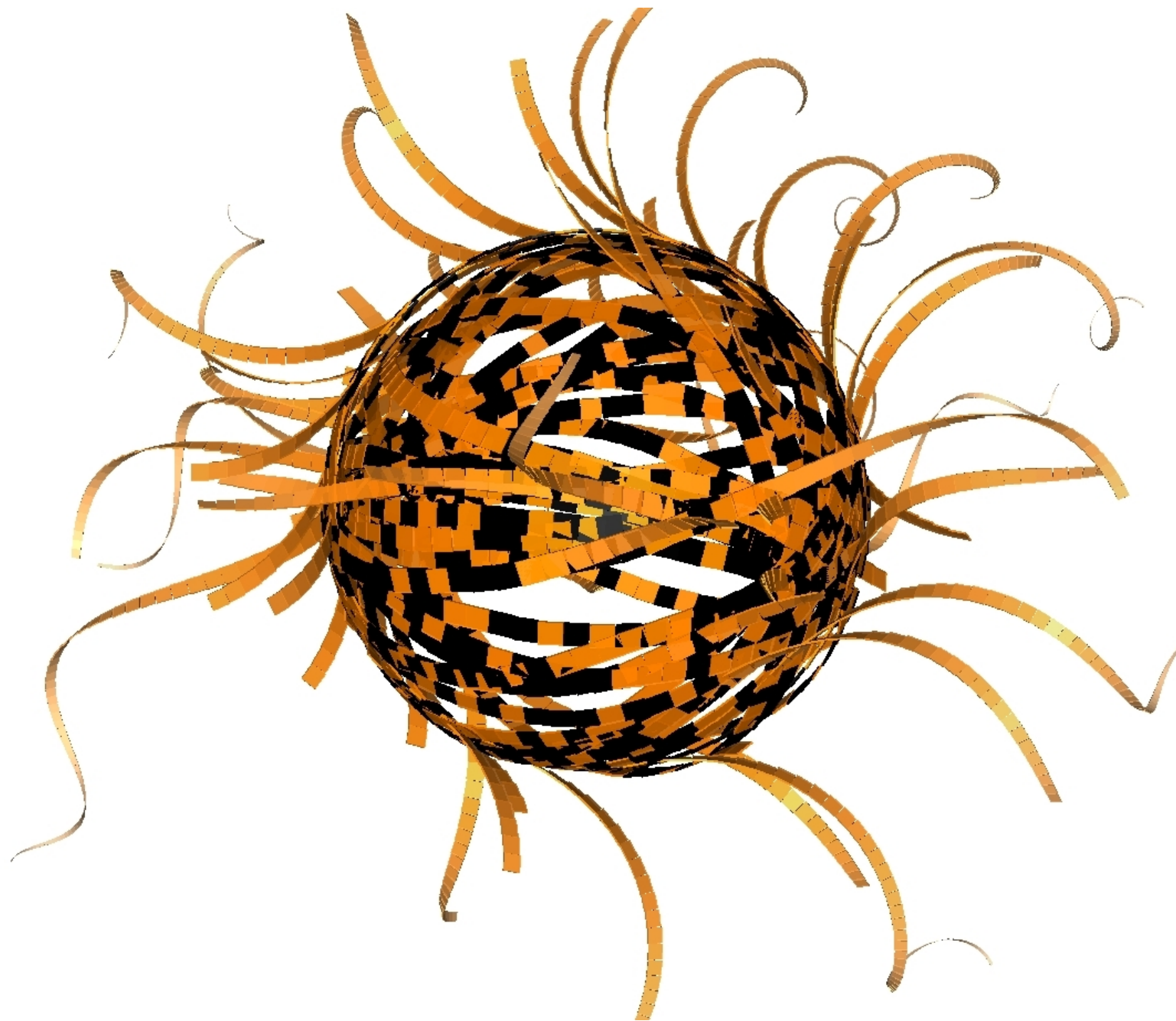


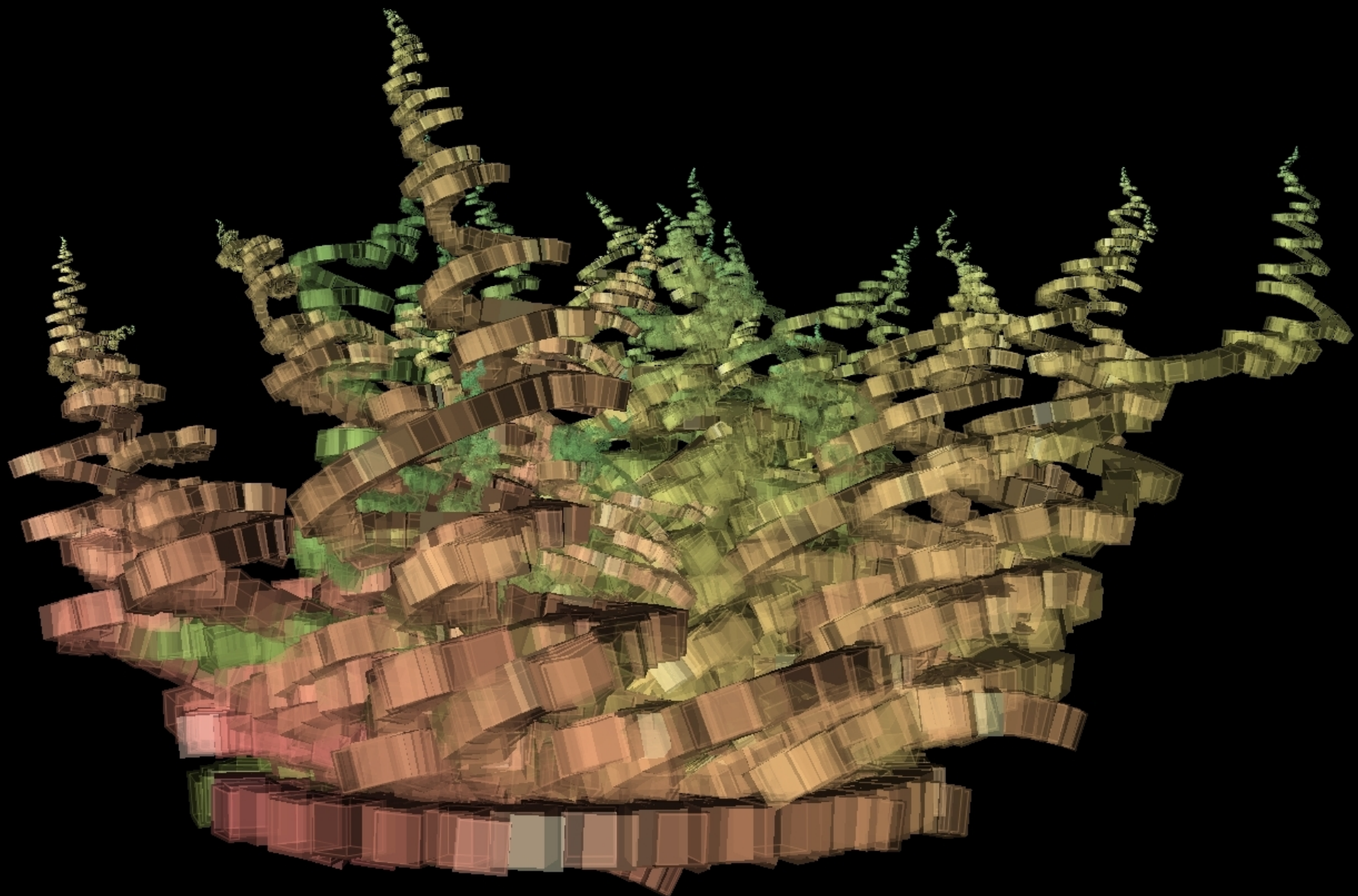


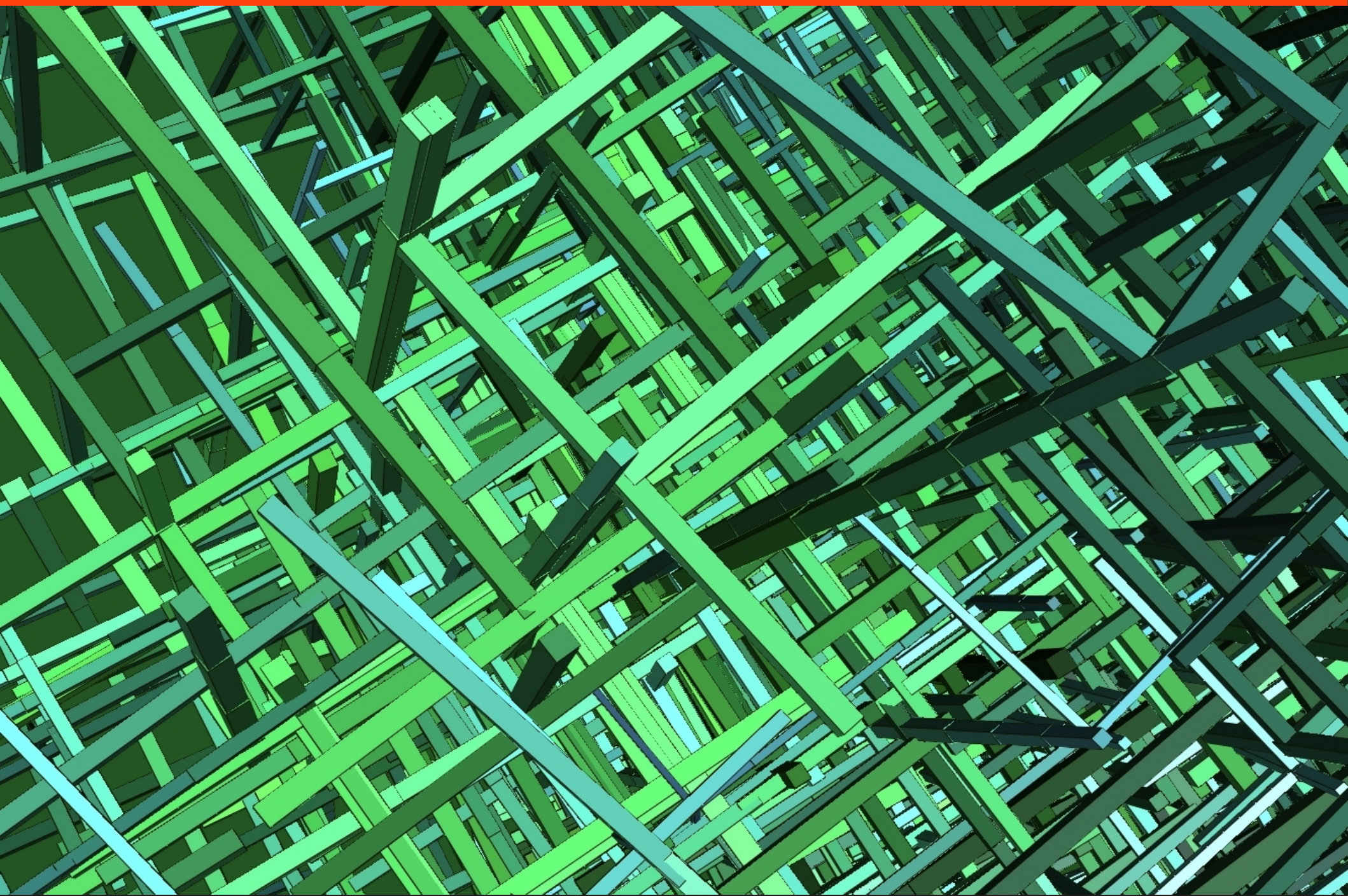




Generování v prostoru







Zadání

Vytvořte a výtvarně zpracujte grafiku generovanou pomocí programů ContextFree nebo StructureSynth

Obrázek uložte včetně generující gramatiky

nejlépe jako soubor zip, rar, tar.gz ...