

# Nets and tilings as models for crystals

Olaf Delgado-Friedrichs

CG Week Brisbane, 4 July 2017



[Crystal Model  
Hierarchy](#)

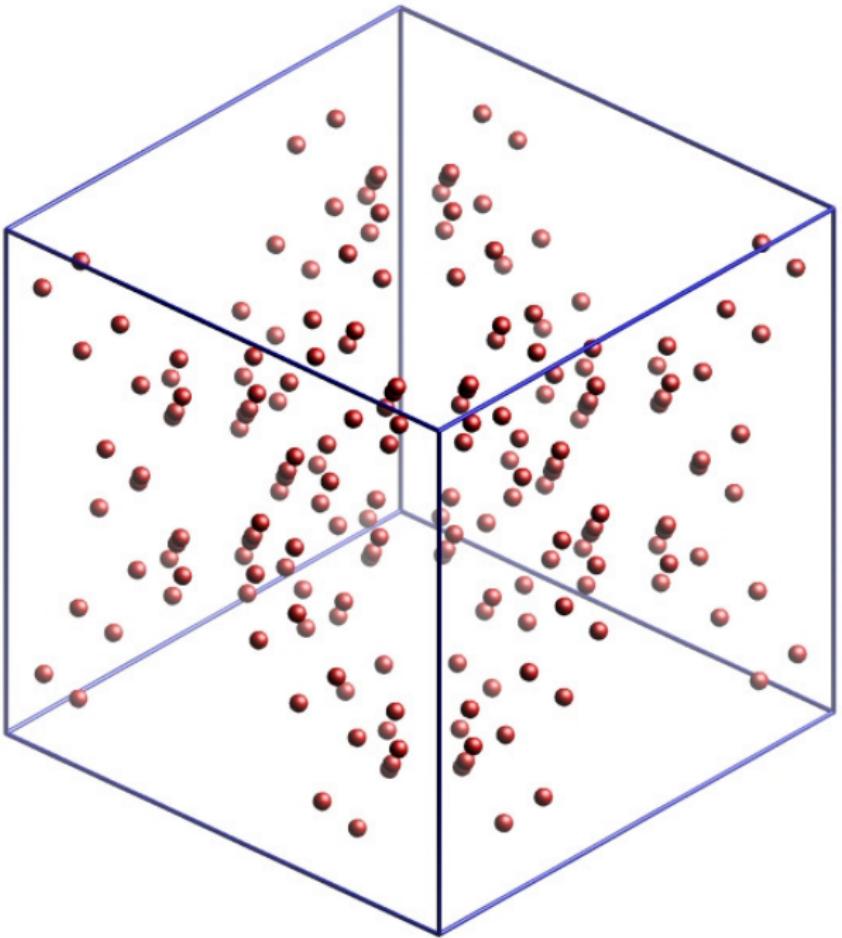
[Periodic Tilings](#)

[Another Collatz  
Problem](#)

[Delaney-Dress  
Symbols](#)

[Heaven And Hell](#)

[Demo](#)



Crystal Model  
Hierarchy

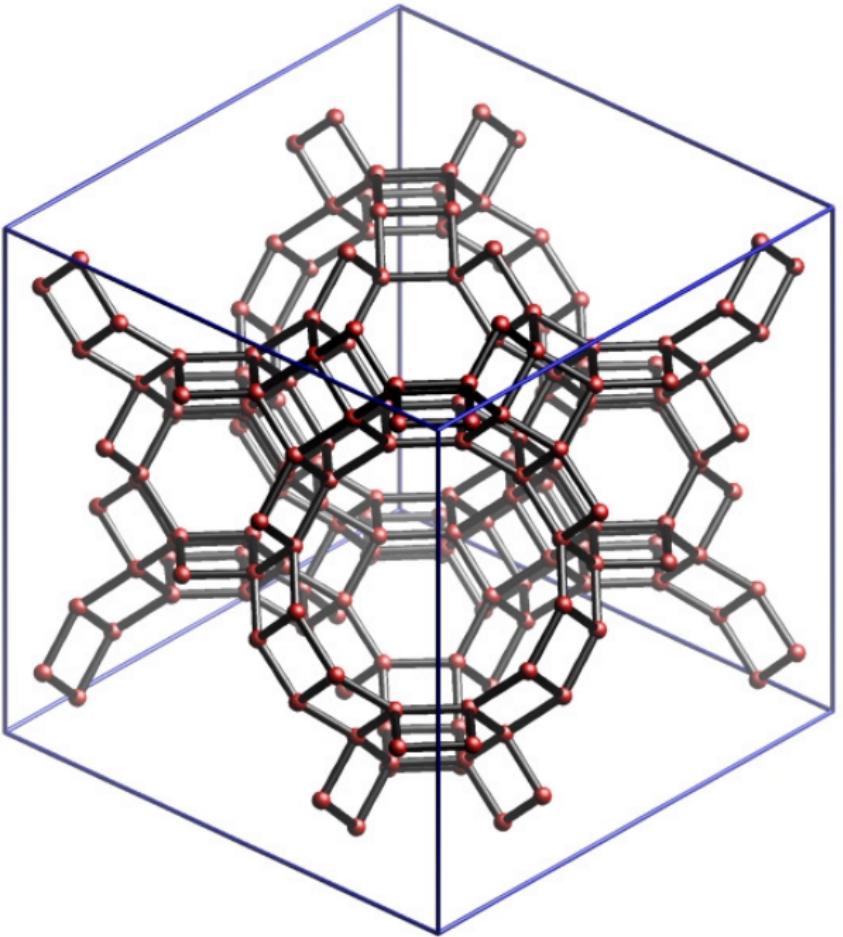
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Crystal Model  
Hierarchy

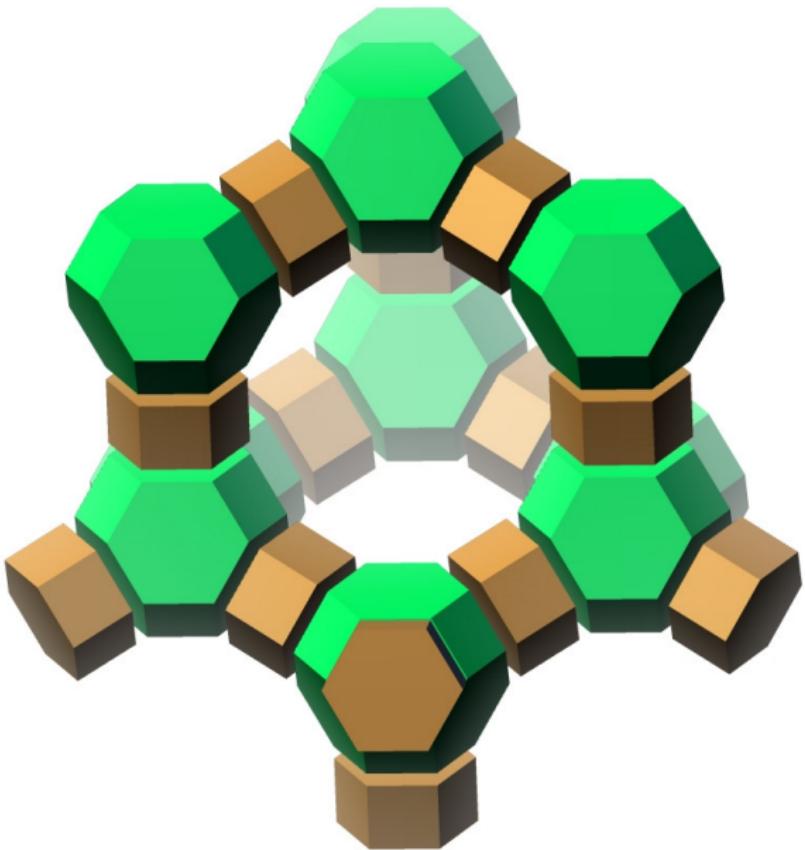
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Crystal Model  
Hierarchy

Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo

Crystal Model  
Hierarchy

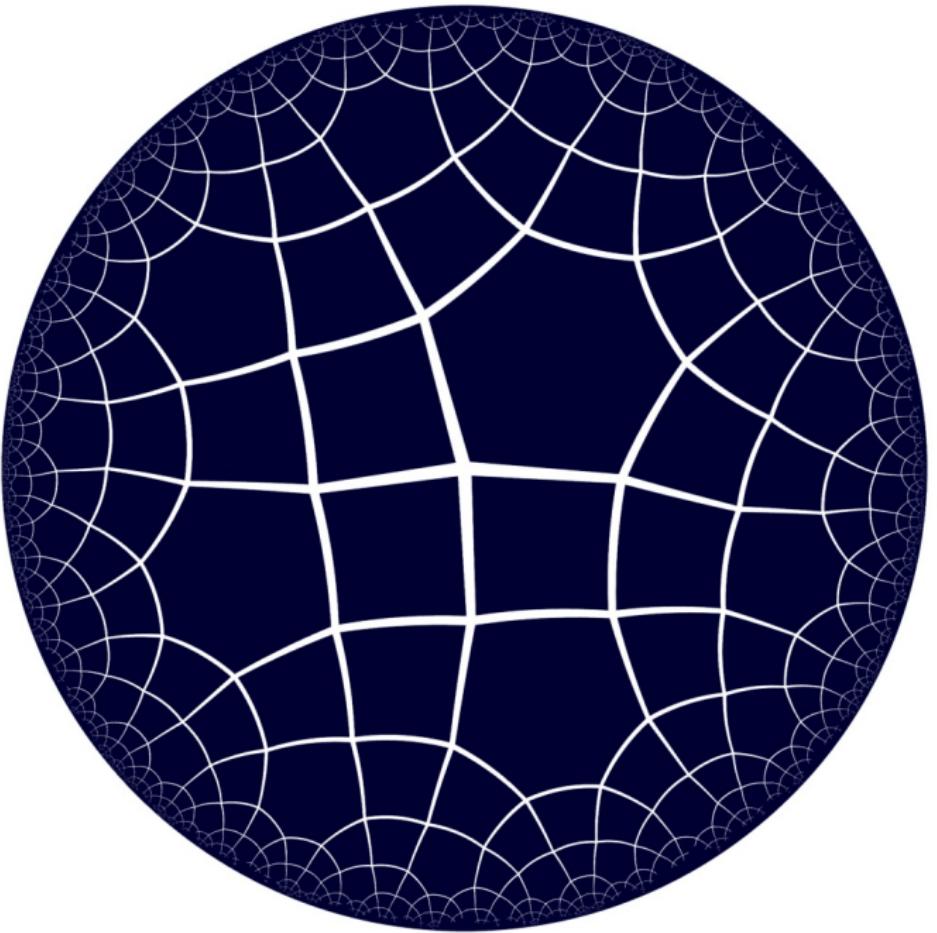
Periodic Tilings

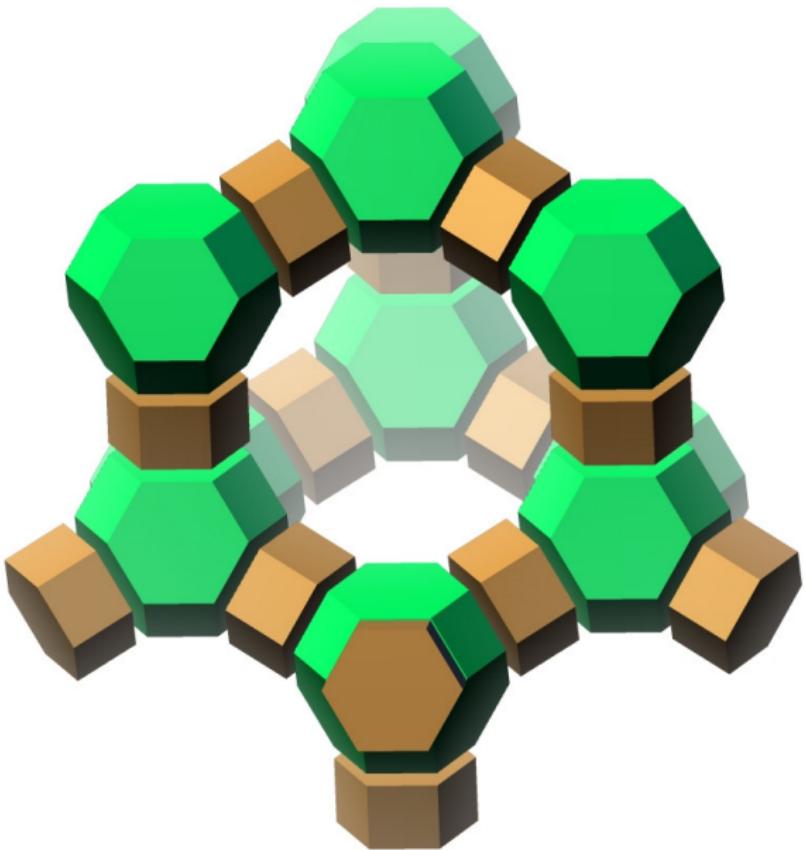
Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo





Crystal Model  
Hierarchy

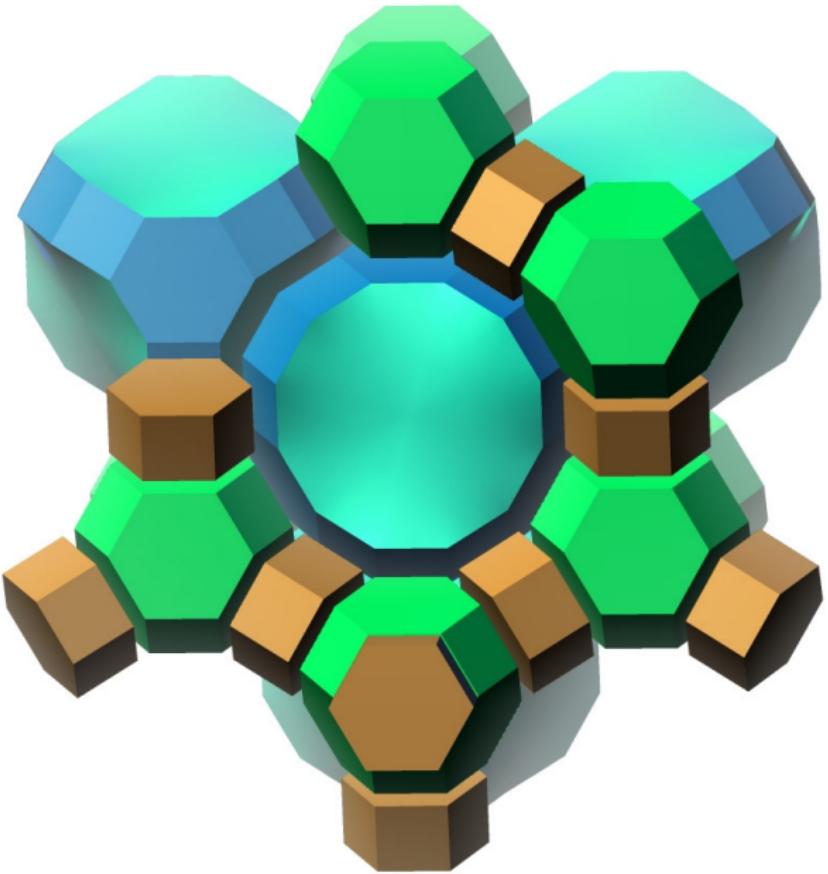
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Crystal Model  
Hierarchy

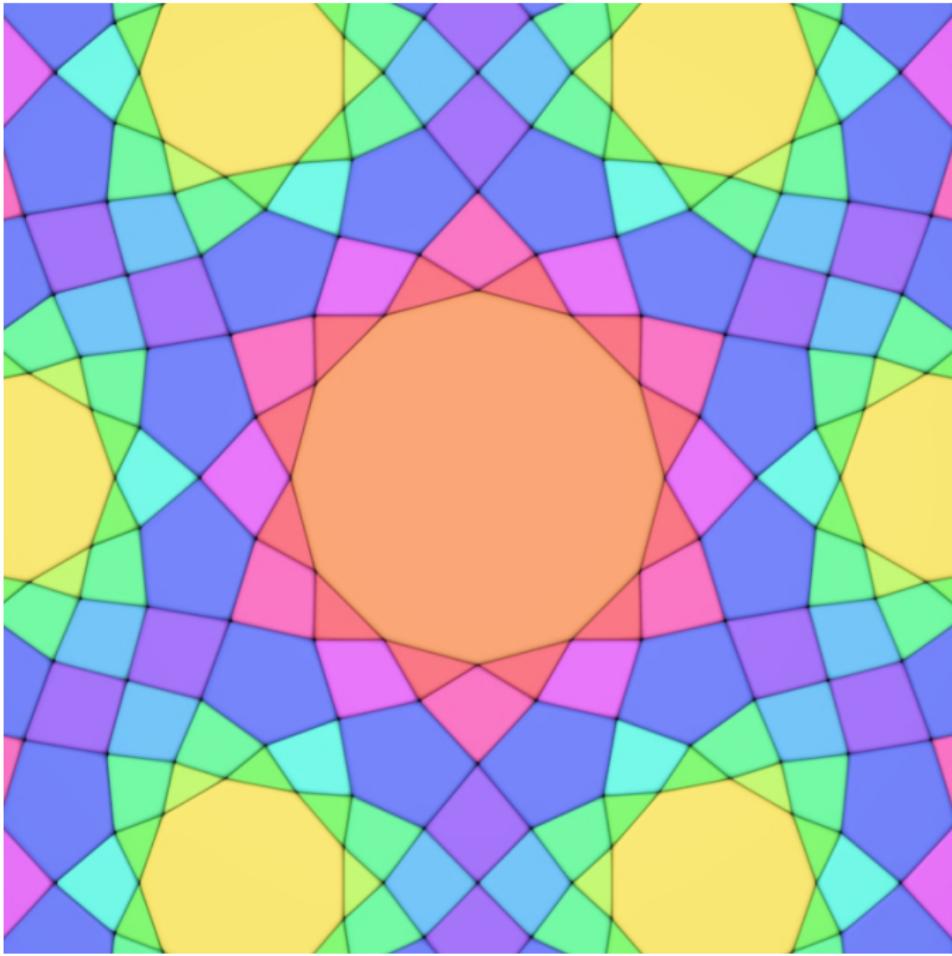
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Nets and tilings as  
models for crystals

Olaf Delgado

Crystal Model  
Hierarchy

Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo

Crystal Model  
Hierarchy

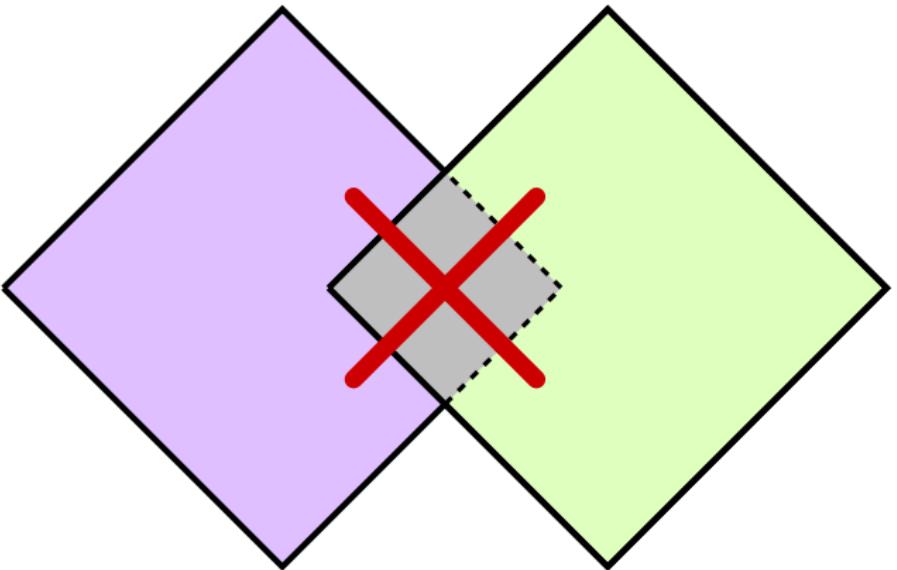
Periodic Tilings

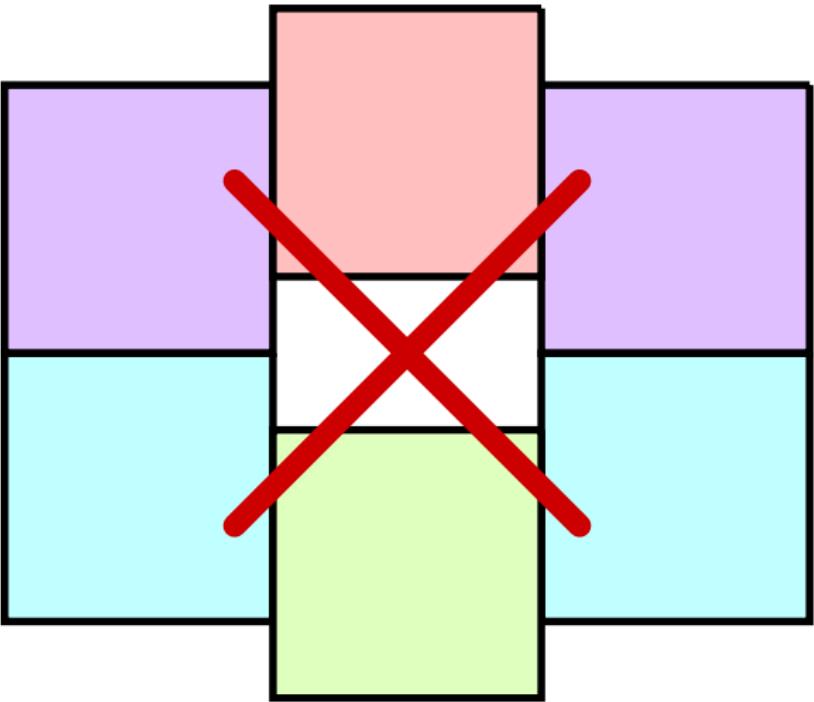
Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo





Crystal Model  
Hierarchy

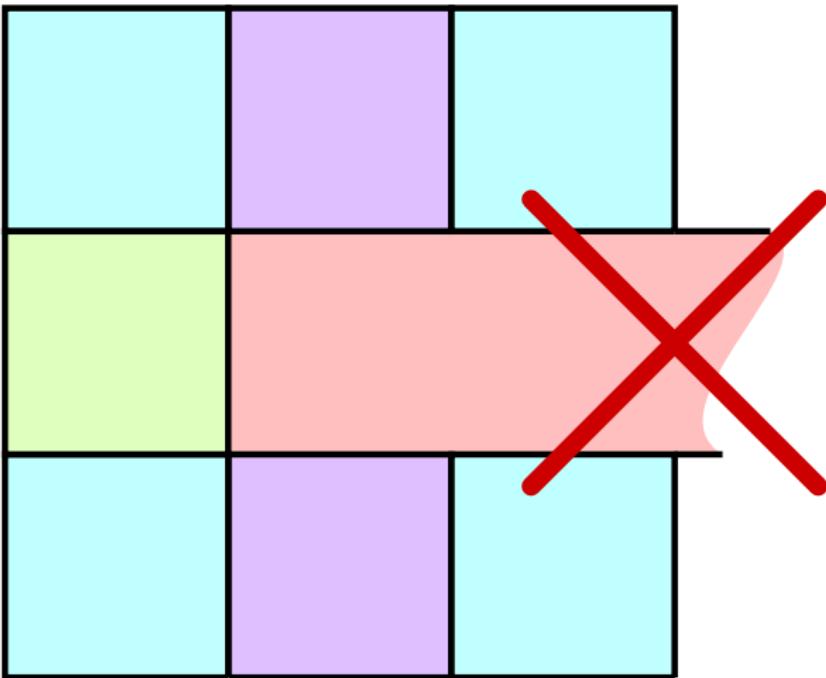
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



[Crystal Model  
Hierarchy](#)

[Periodic Tilings](#)

[Another Collatz  
Problem](#)

[Delaney-Dress  
Symbols](#)

[Heaven And Hell](#)

[Demo](#)

Crystal Model  
Hierarchy

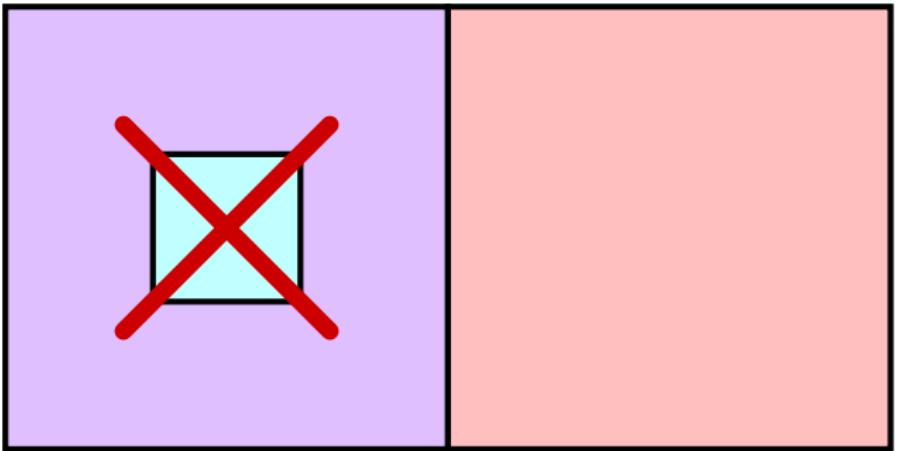
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Crystal Model  
Hierarchy

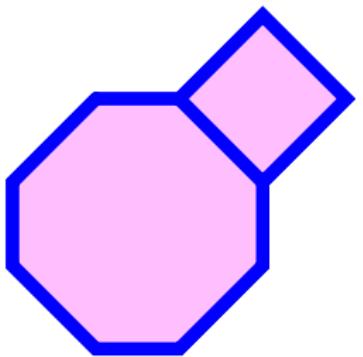
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Crystal Model  
Hierarchy

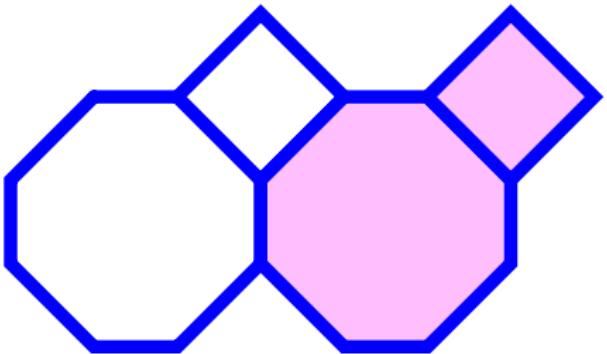
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



[Crystal Model  
Hierarchy](#)

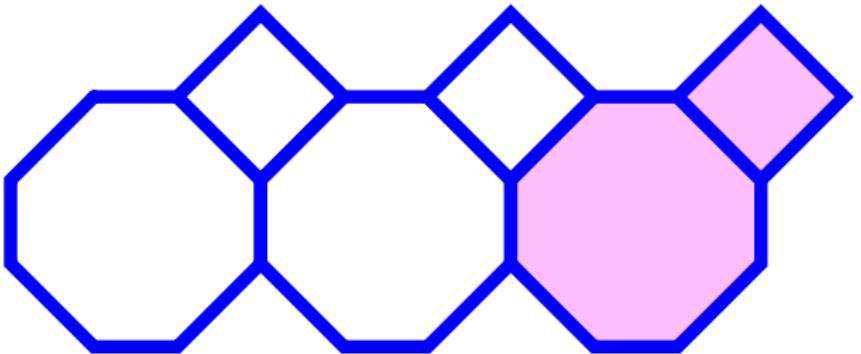
[Periodic Tilings](#)

[Another Collatz  
Problem](#)

[Delaney-Dress  
Symbols](#)

[Heaven And Hell](#)

[Demo](#)



[Crystal Model  
Hierarchy](#)

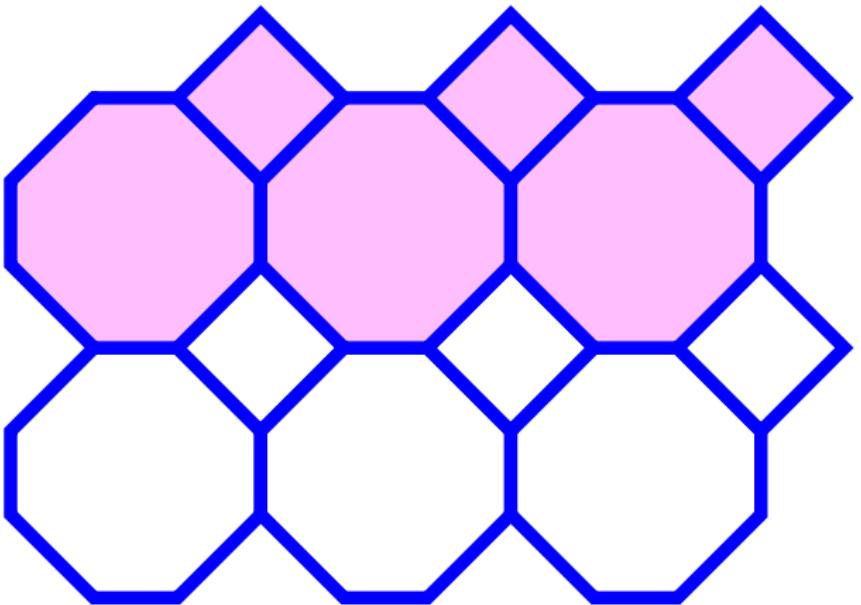
[Periodic Tilings](#)

[Another Collatz  
Problem](#)

[Delaney-Dress  
Symbols](#)

[Heaven And Hell](#)

[Demo](#)



[Crystal Model  
Hierarchy](#)

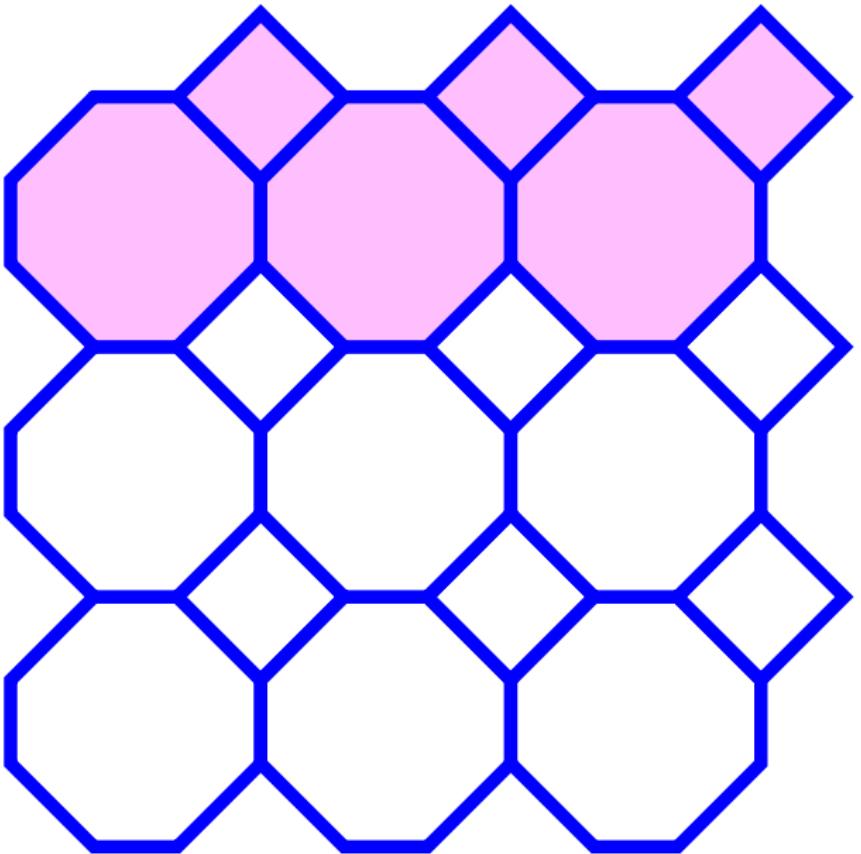
[Periodic Tilings](#)

[Another Collatz  
Problem](#)

[Delaney-Dress  
Symbols](#)

[Heaven And Hell](#)

[Demo](#)



[Crystal Model  
Hierarchy](#)

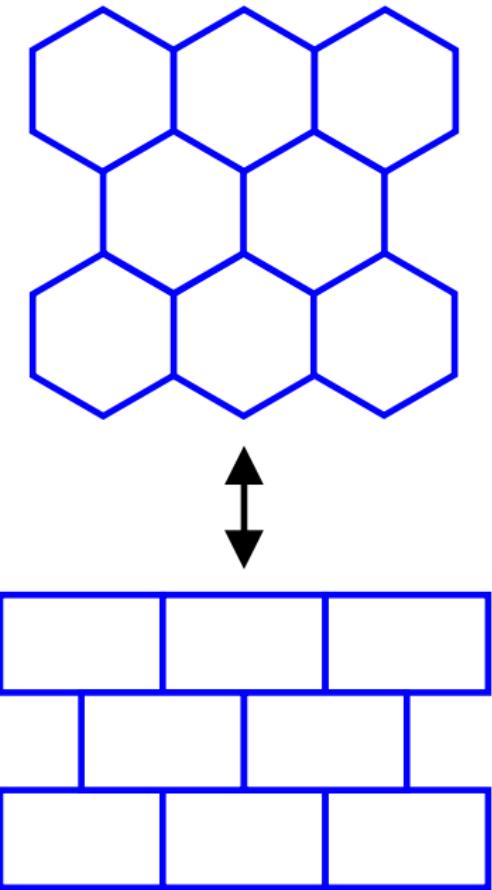
[Periodic Tilings](#)

[Another Collatz  
Problem](#)

[Delaney-Dress  
Symbols](#)

[Heaven And Hell](#)

[Demo](#)



[Crystal Model  
Hierarchy](#)

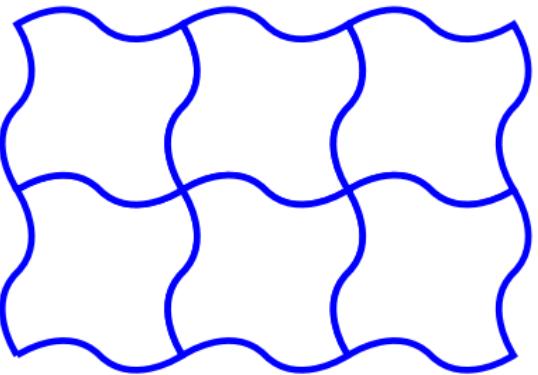
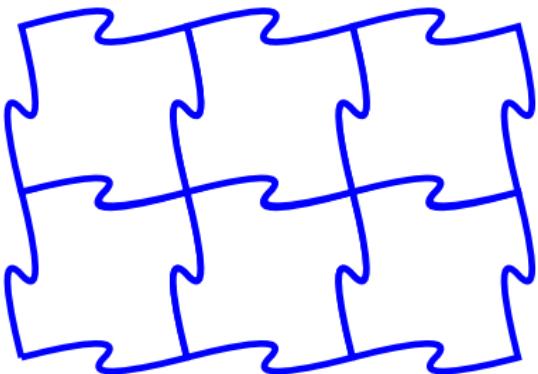
[Periodic Tilings](#)

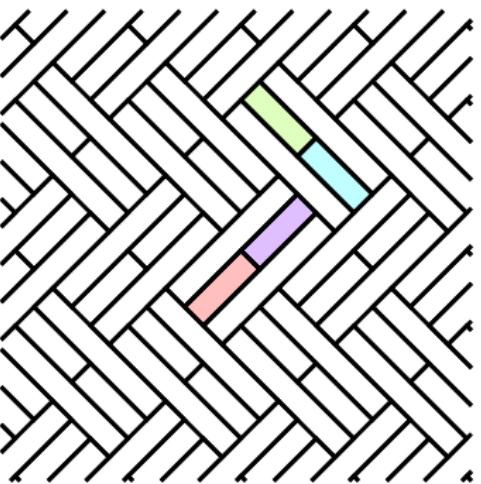
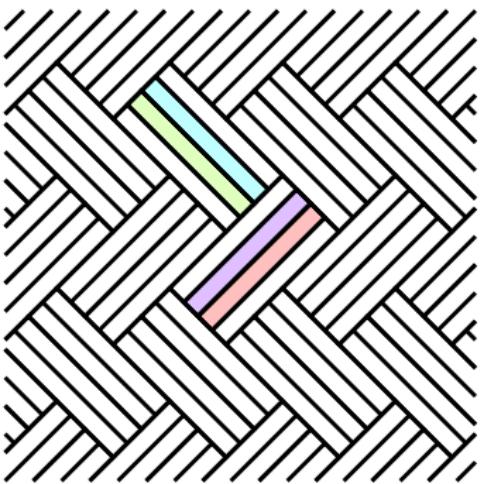
[Another Collatz  
Problem](#)

[Delaney-Dress  
Symbols](#)

[Heaven And Hell](#)

[Demo](#)





Crystal Model  
Hierarchy

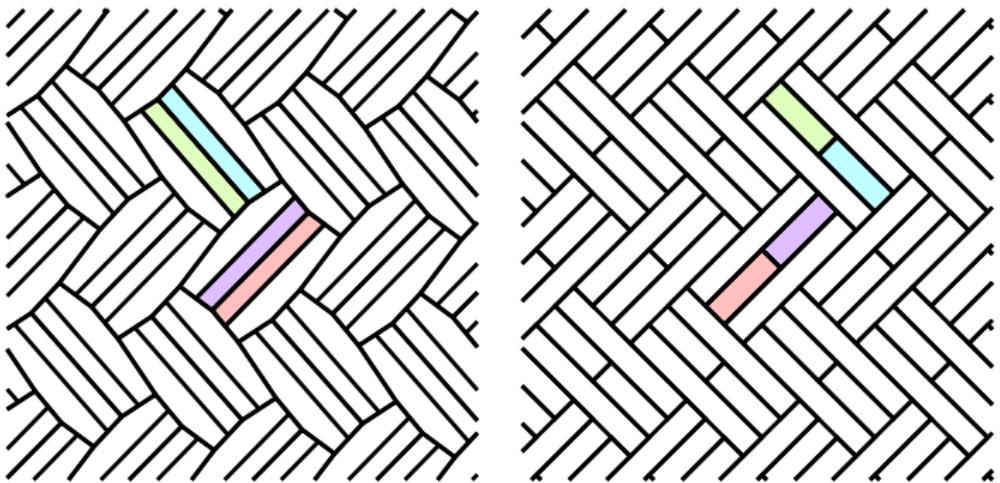
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Crystal Model  
Hierarchy

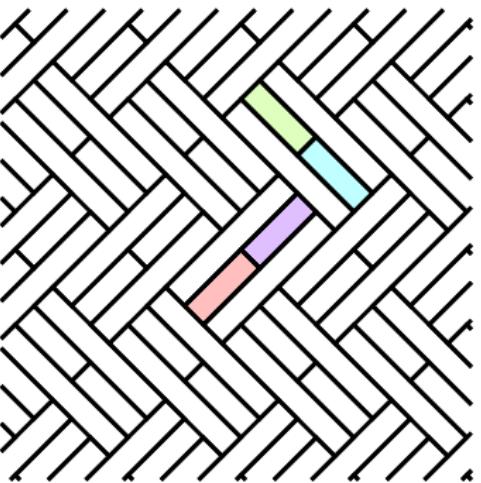
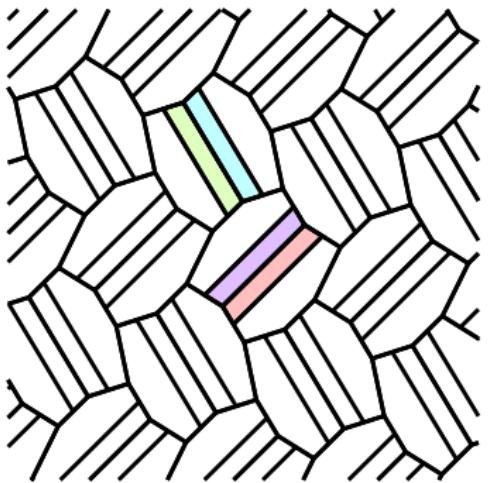
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



[Crystal Model  
Hierarchy](#)

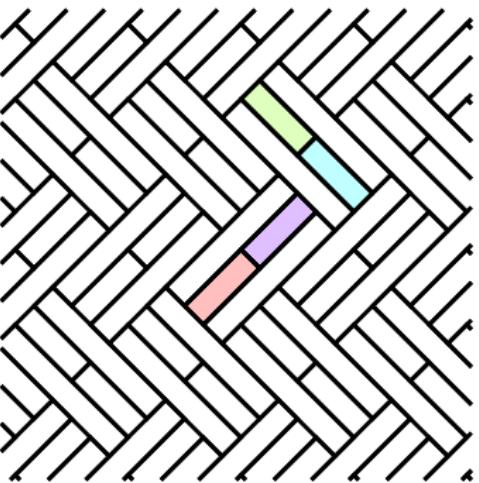
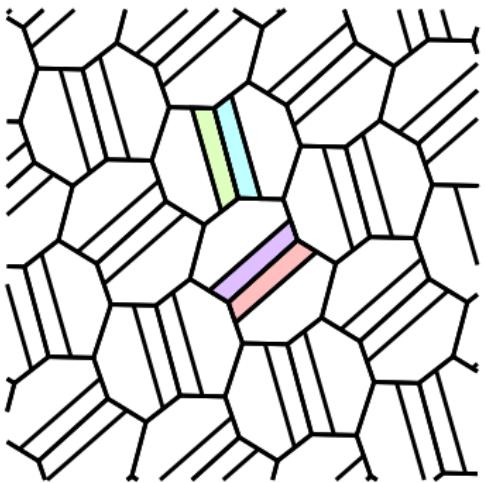
[Periodic Tilings](#)

[Another Collatz  
Problem](#)

[Delaney-Dress  
Symbols](#)

[Heaven And Hell](#)

[Demo](#)



Crystal Model  
Hierarchy

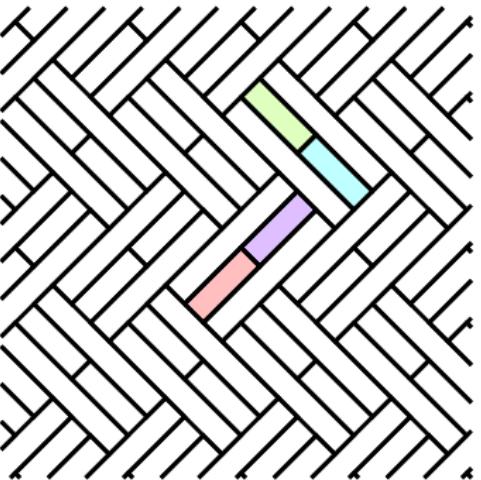
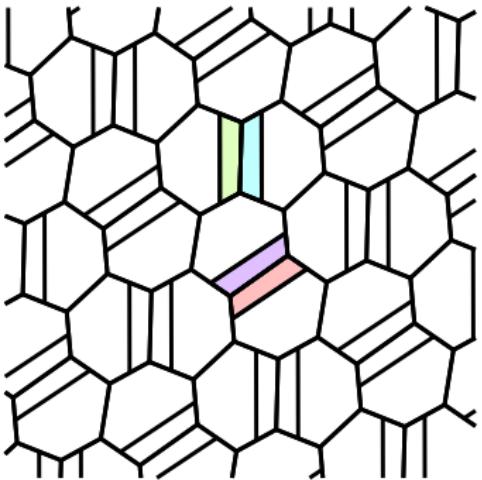
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Crystal Model  
Hierarchy

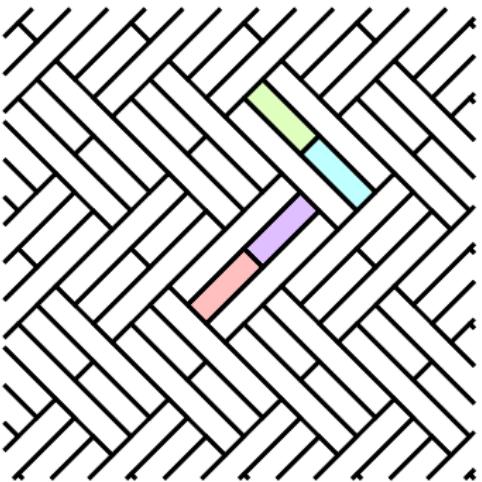
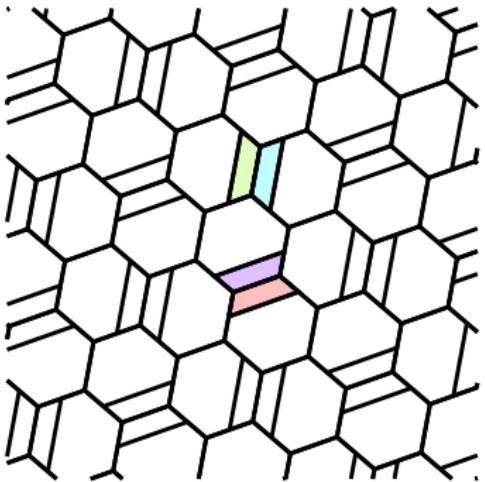
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Crystal Model  
Hierarchy

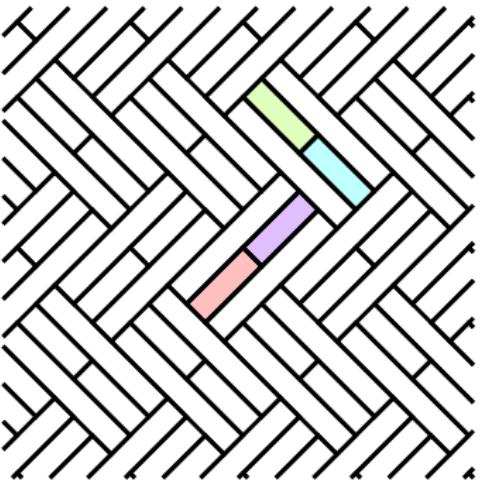
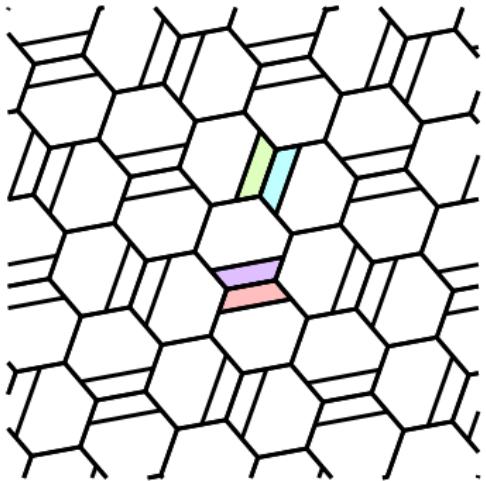
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Crystal Model  
Hierarchy

Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo

[Crystal Model  
Hierarchy](#)

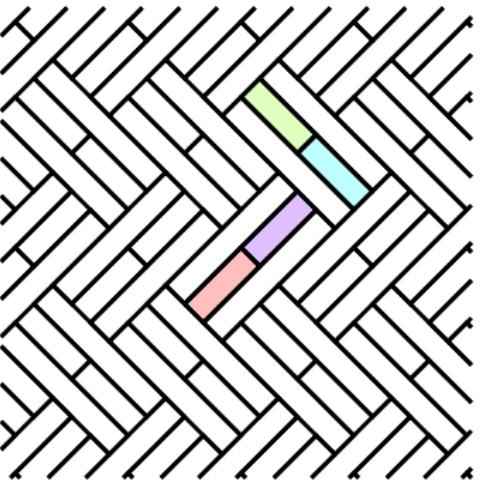
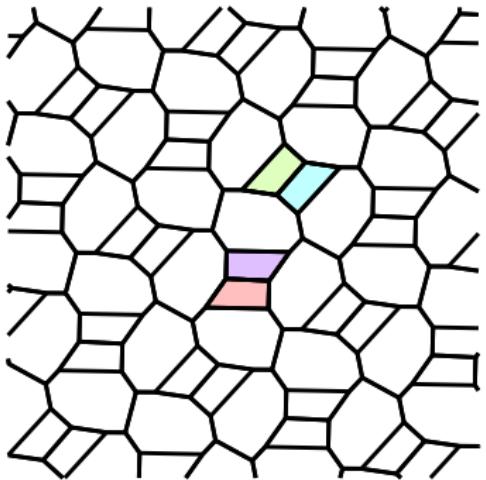
[Periodic Tilings](#)

[Another Collatz  
Problem](#)

[Delaney-Dress  
Symbols](#)

[Heaven And Hell](#)

[Demo](#)



[Crystal Model  
Hierarchy](#)

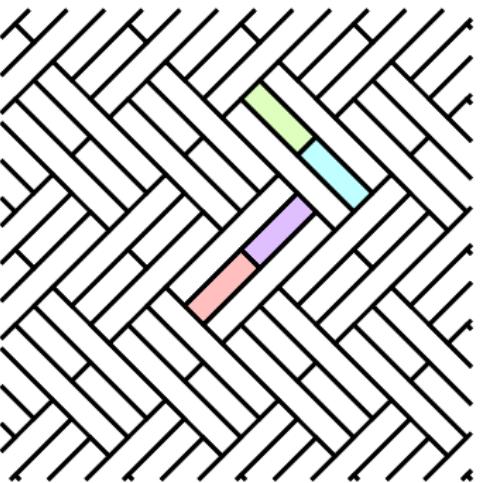
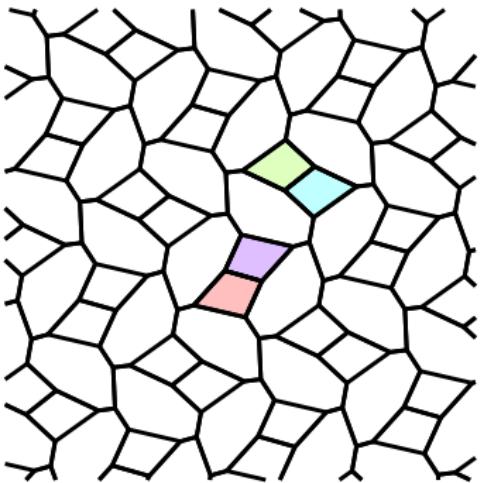
[Periodic Tilings](#)

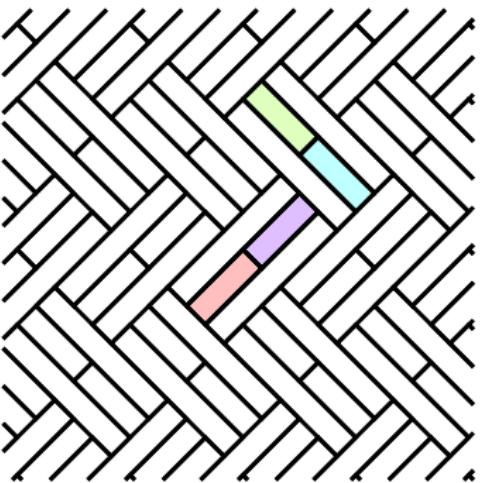
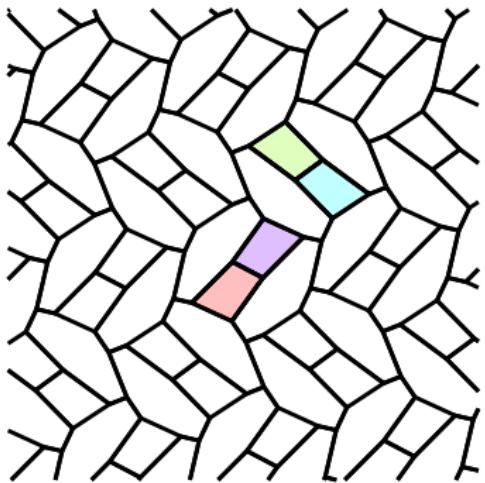
[Another Collatz  
Problem](#)

[Delaney-Dress  
Symbols](#)

[Heaven And Hell](#)

[Demo](#)





Crystal Model  
Hierarchy

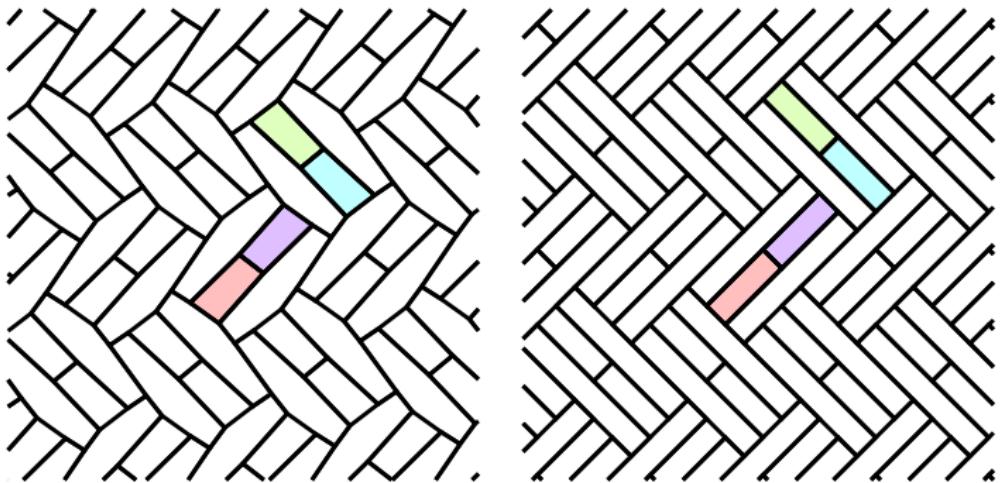
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Crystal Model  
Hierarchy

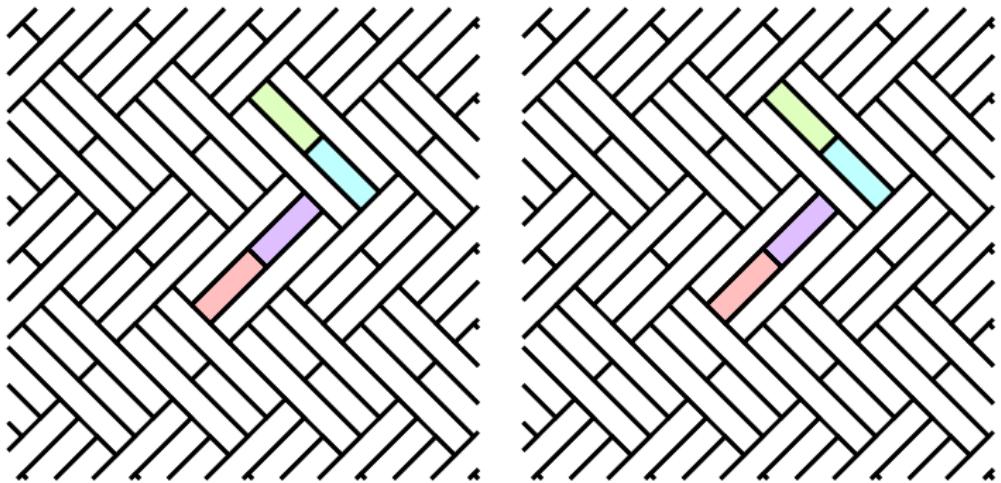
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Crystal Model  
Hierarchy

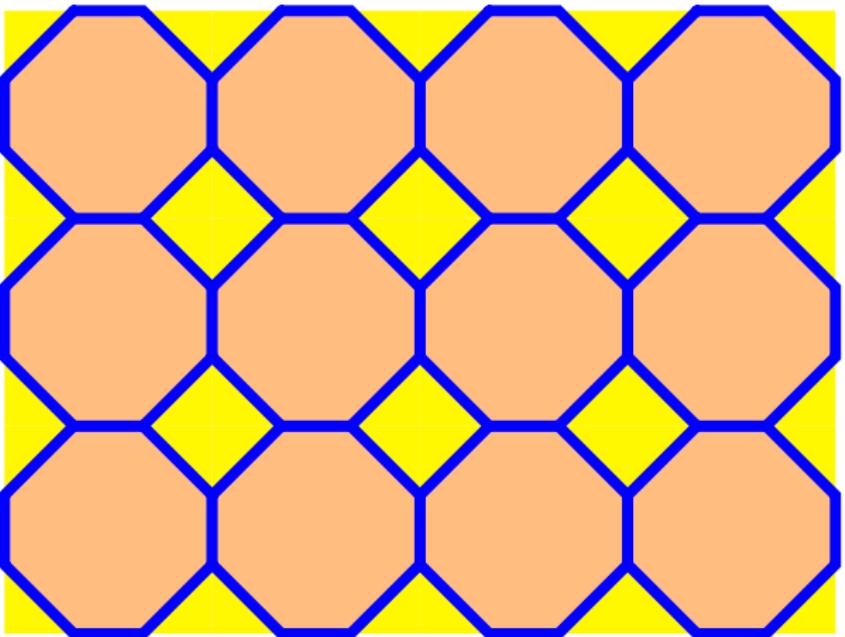
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



[Crystal Model  
Hierarchy](#)

[Periodic Tilings](#)

[Another Collatz  
Problem](#)

[Delaney-Dress  
Symbols](#)

[Heaven And Hell](#)

[Demo](#)

[Crystal Model  
Hierarchy](#)

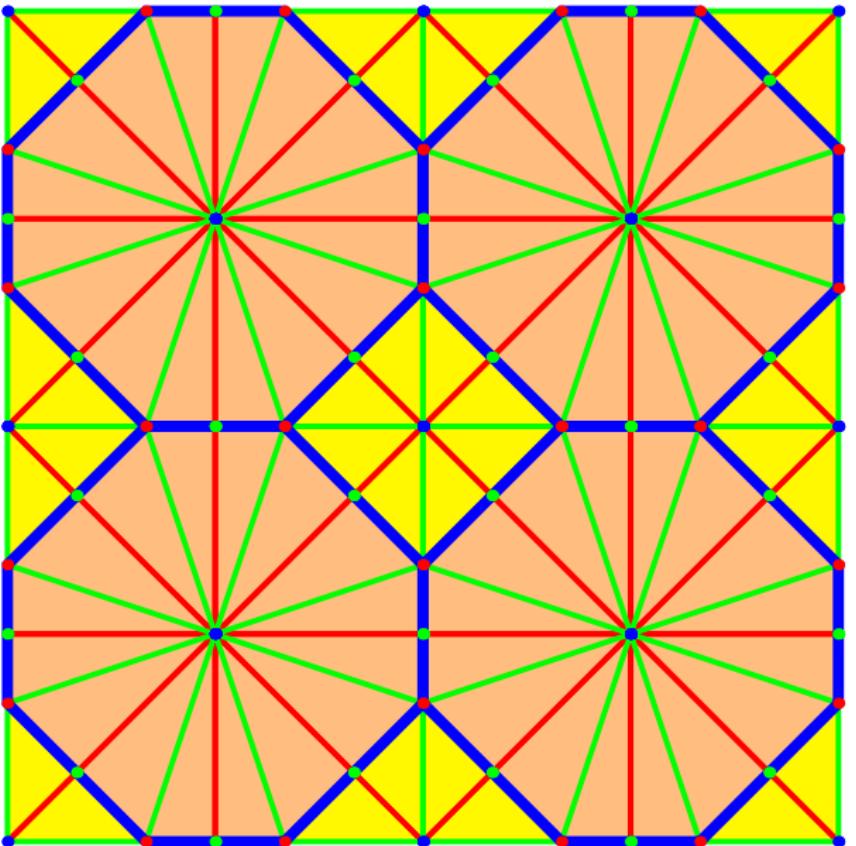
[Periodic Tilings](#)

[Another Collatz  
Problem](#)

[Delaney-Dress  
Symbols](#)

[Heaven And Hell](#)

[Demo](#)



Crystal Model  
Hierarchy

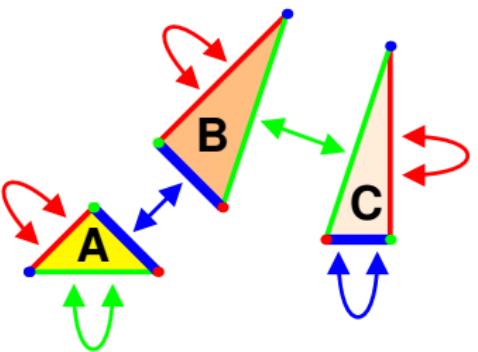
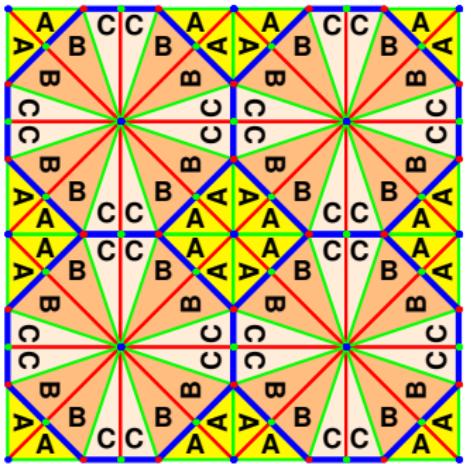
Periodic Tilings

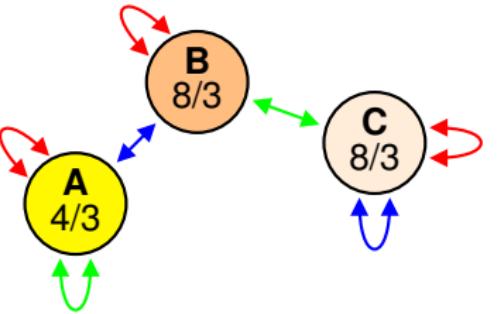
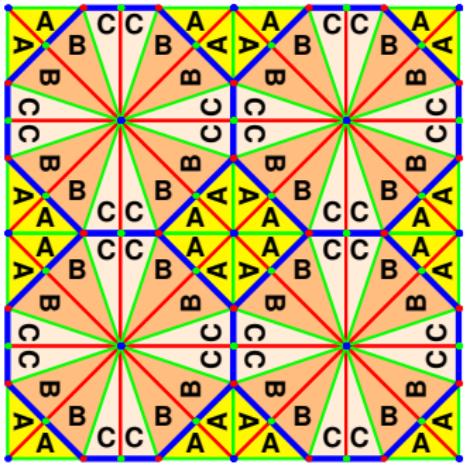
Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo





Crystal Model  
Hierarchy

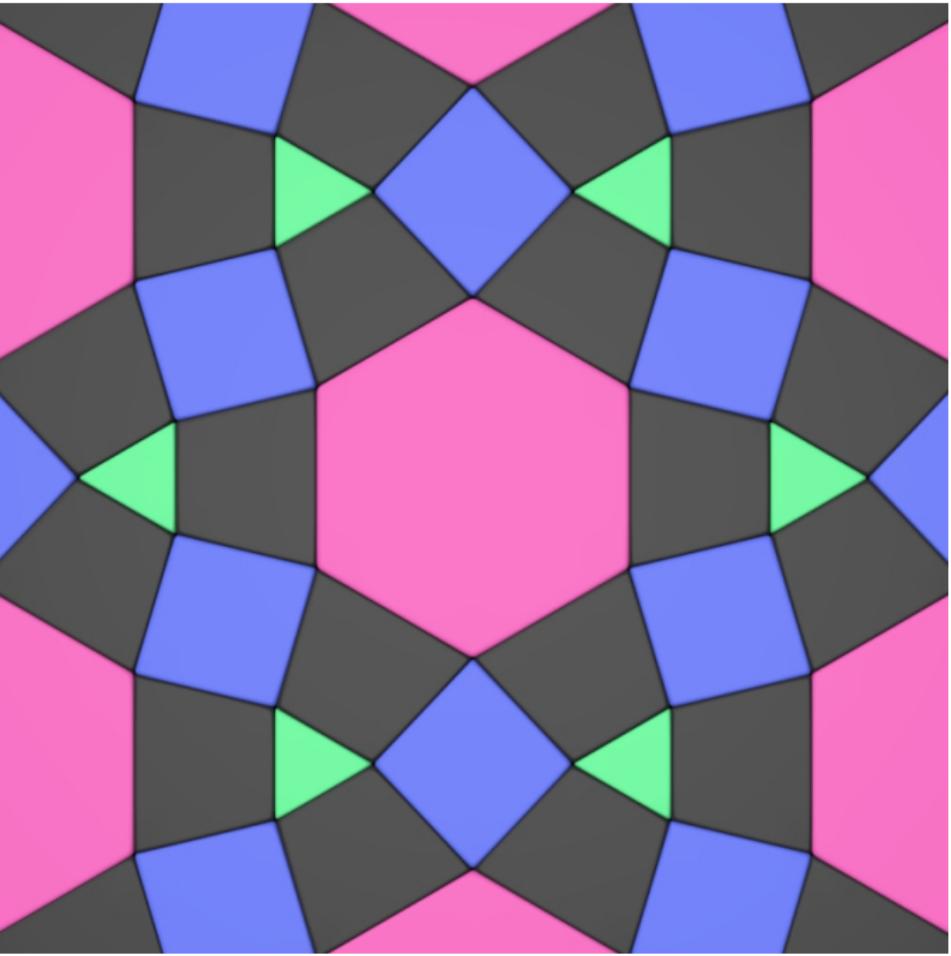
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



Nets and tilings as  
models for crystals

Olaf Delgado

Crystal Model  
Hierarchy

Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo

Crystal Model  
Hierarchy

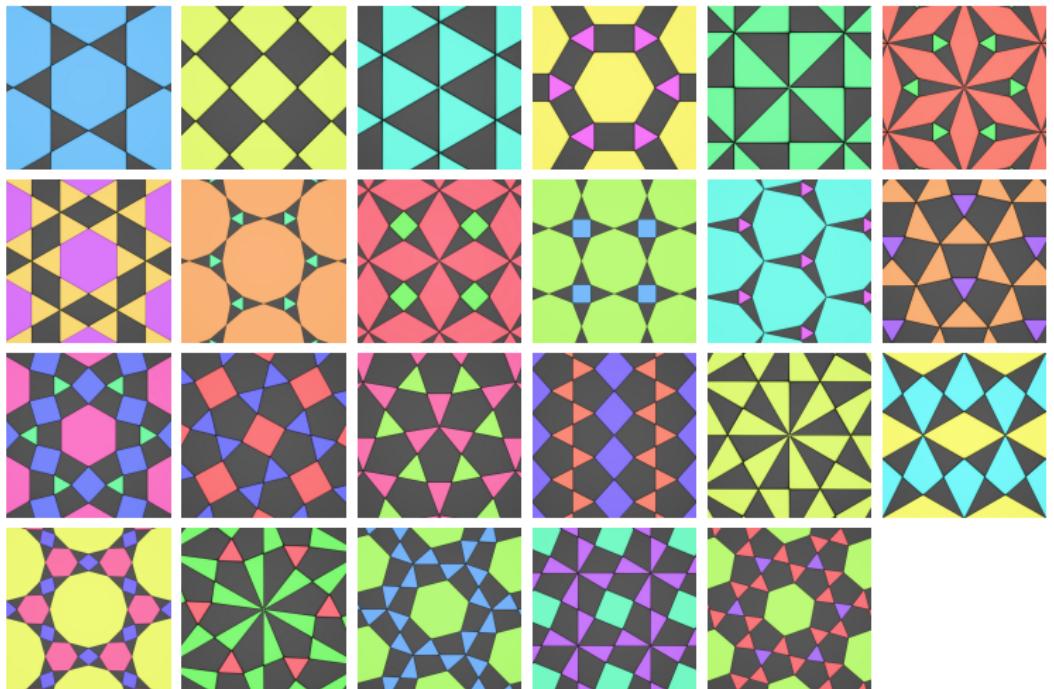
Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo



A.W.M. Dress, D.H. Huson. *Revue Topologie Structurale*, 1991

Crystal Model  
Hierarchy

Periodic Tilings

Another Collatz  
Problem

Delaney-Dress  
Symbols

Heaven And Hell

Demo

# Demo