

Dror Bar-Natan: Talks: Fields-0911:

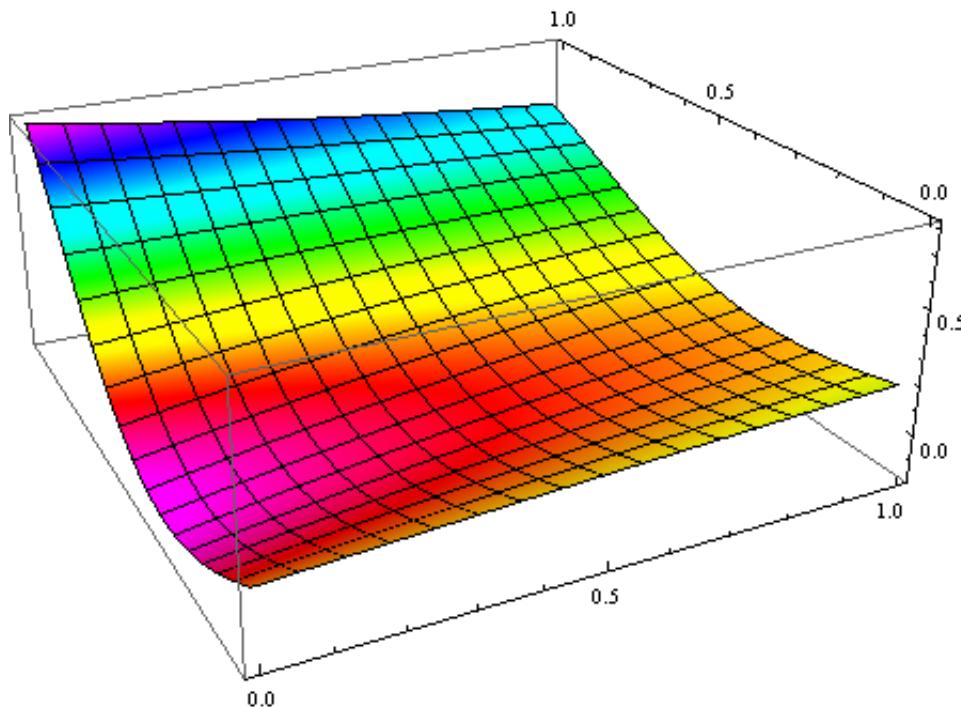
Dror Bar-Natan: Academic Pensieve: 2009-11:

Hilbert's 13th Problem

Pensieve Header: Hilbert's 13th problem - plots of the Riemann zeta function.

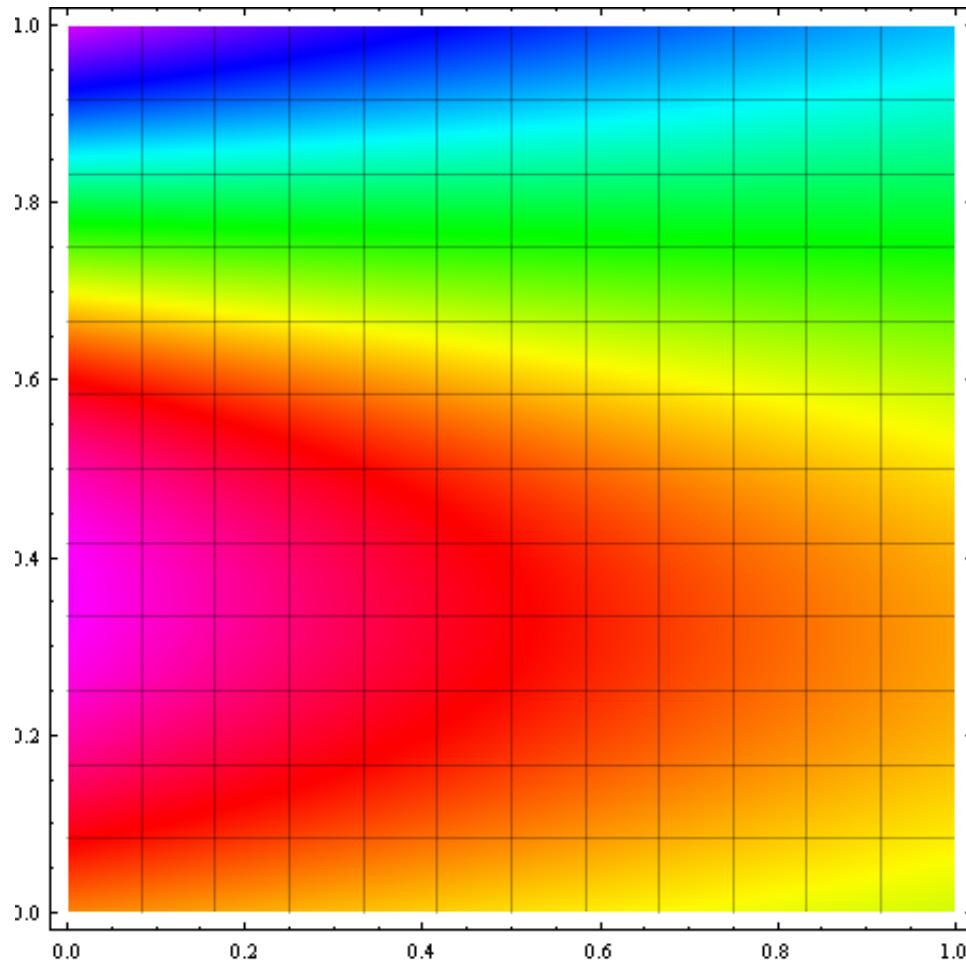
```
<< C:\drorbn\AcademicPensieve\2009-11\Hilbert13th-Program.m
```

```
Zeta3D = Rasterize[
  Plot3D[f[x, y], {x, 0, 1}, {y, 0, 1},
  ImageSize → 450
 ], ImageSize → 450, RasterSize → 450
]
```



```
Export[
 "C:/drorbn/AcademicPensieve/2009-11/Zeta3D.png",
 ImageCrop[Zeta3D]
]
C:/drorbn/AcademicPensieve/2009-11/Zeta3D.png
```

```
ZetaInHues = Rasterize[  
  DensityPlot[f[x, y], {x, 0, 1}, {y, 0, 1},  
   Mesh -> 11, ImageSize -> 450  
>, ImageSize -> 450, RasterSize -> 450  
>]
```



```
Export[  
  "C:/drorbn/AcademicPensieve/2009-11/ZetaInHues.png",  
  ImageCrop[ZetaInHues]  
>]  
C:/drorbn/AcademicPensieve/2009-11/ZetaInHues.png
```