

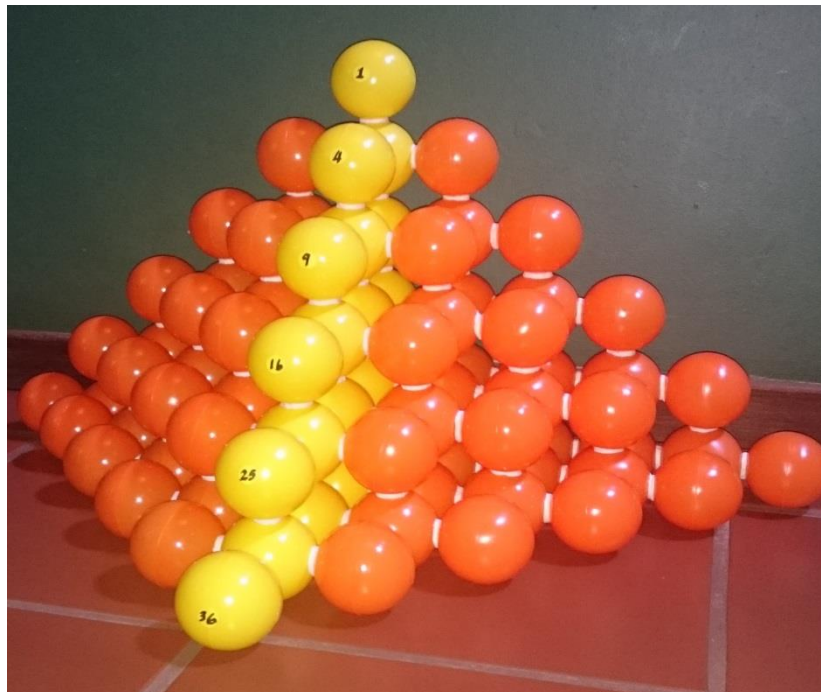


The Pattern Workshops

*Join us Sundays @ 11:00 @ Karoo Café
@ corner of Lynnwood Rd and Albeth Rd, Pretoria East*

Working Paper 2

Quantum Gravity Module



Booking essential

thepatternworkshops@gmail.com

Age: 12 years and older

What happens at the Pattern Workshop?

At this workshop you will participate in the construction of a Quantum Gravity Module.

What makes the Quantum Gravity Module (QGM) so special?

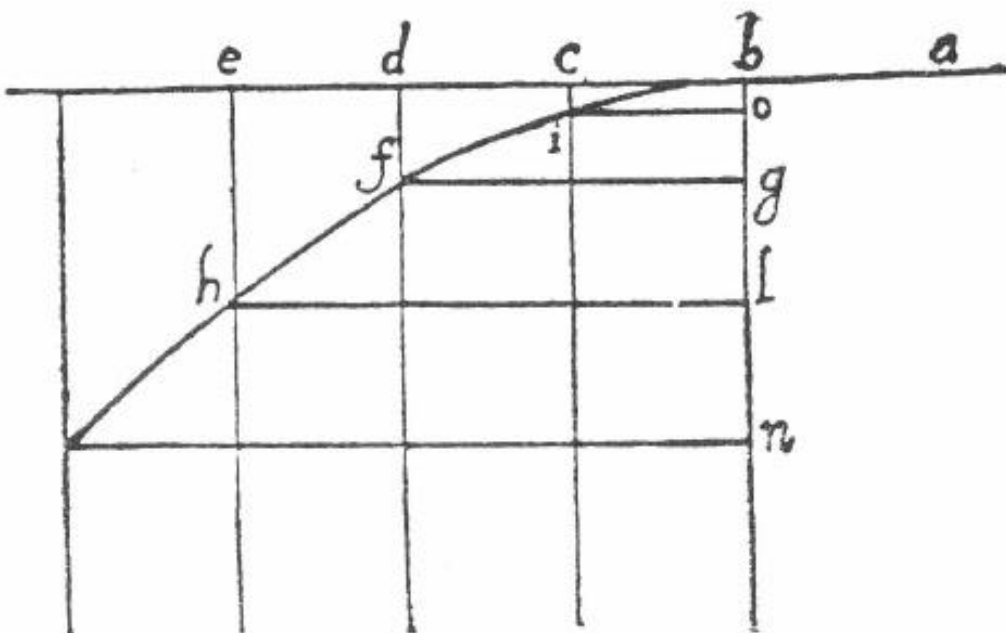
Quantum gravity is the so-called holy grail of physics because it supposedly will bring together classical physics and quantum physics in one coherent scheme. The QGM that is shown here is evidence that such a coherent framework (the Pattern) does indeed exist.

However, to understand the structure of the QGM it is necessary to start where Galileo started more than 400 years ago.

The 'odd numbers rule' of Galileo is given by the following table:

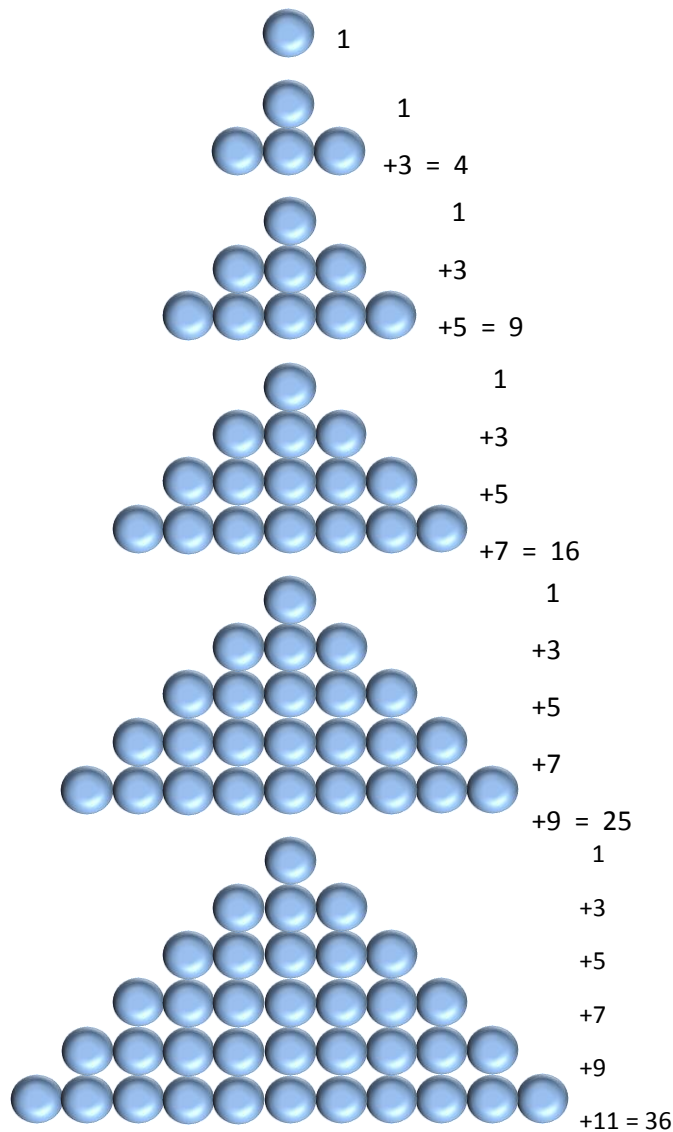
Time	Distance fallen		"Odd numbers rule"
1	1	=	1
2	4	=	1 + 3
3	9	=	1 + 3 + 5
4	16	=	1 + 3 + 5 + 7
5	25	=	1 + 3 + 5 + 7 + 9
6	36	=	1 + 3 + 5 + 7 + 9 + 11

The following drawing is from Galileo's notes. The times are from right to left and indicated by a, b, c, d and e. The parabolic line shows the arc made by a falling object. The vertical distances (b = 0, ci = 1, df = 4, eh = 9) fallen are included in the table above.

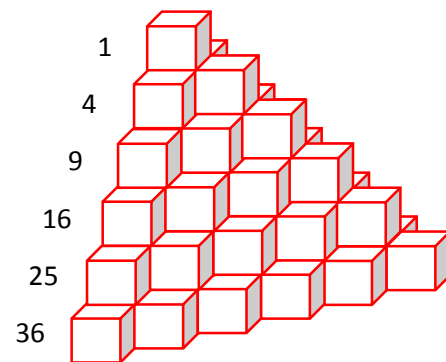


The Structure of the Quantum Gravity Module

The QGM is composed of spheres (or cubes) that represent the distances fallen by an object given by Galileo's 'odd numbers rule'.



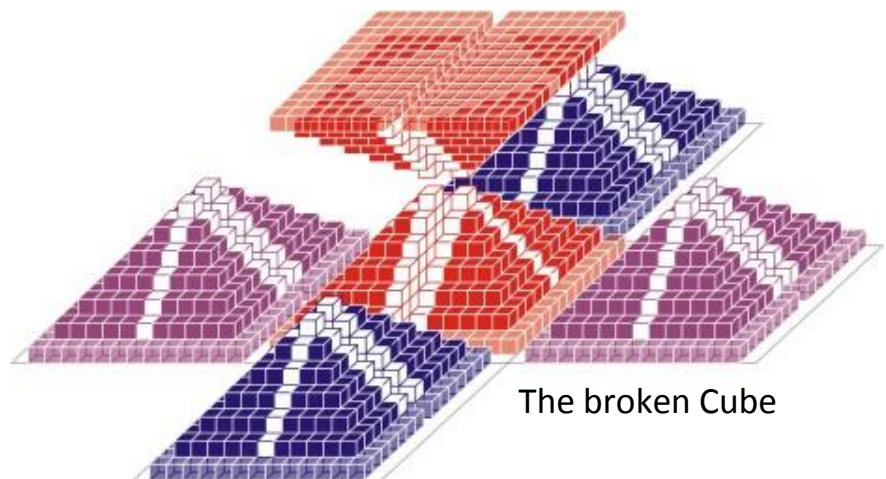
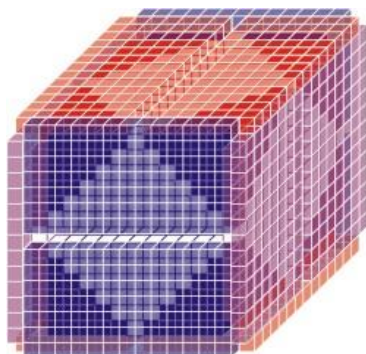
Each layer of the module below represents the number of spheres in each of the individual triangles on the left. The top layer has 1 cube, second layer has four cubes, third layer has 9 cubes, etc.



The Pattern Cube (below) contains twelve Quantum Gravity Modules.

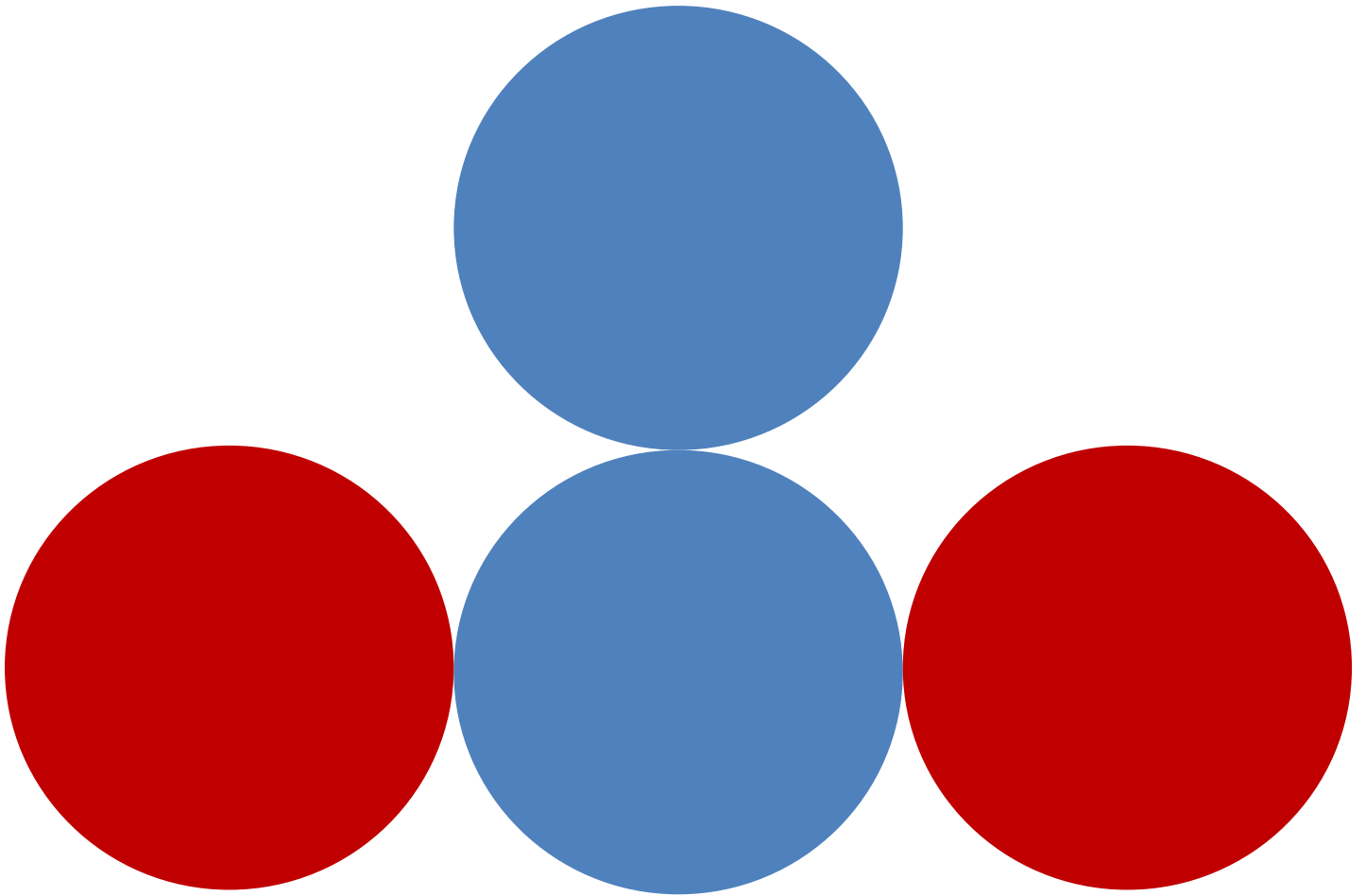
The module that is shown above is the same as the one inside the right-hand half of the centre step pyramid of the broken Cube below. (Only its three diagonal ridges are visible.)

The Pattern Cube



The broken Cube

Visit the Pattern Pieces Folder 2 on thepatternbook.com for more on the Pattern of gravity.



“Our world is, after all, digital - digital at such small scales that it appears to be analogue.”

*Attend a workshop and help us make a
Quantum Gravity Module for display!*