

# Re: There exists a Nim version that is a "draw" OS

**Source:** <http://sci.tech-archive.net/Archive/sci.math/2004-07/2258.html>

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**Date:** 07/09/04

Date: Fri, 9 Jul 2004 15:40:54 -0700

"David Kastrup" <[dak@gnu.org](mailto:dak@gnu.org)> wrote in message  
news:x5brio96su.fsf@lola.goethe.zz...

> *Archimedes Plutonium* <[a\\_plutonium@iw.net](mailto:a_plutonium@iw.net)> writes:

>

>> *I am unsure of Nim rules and have never played the game. I remember*

>> *only that it is about picking up some objects so that the loser has*

>> *to pick up the last object. I forget whether the objects are in 3*

>> *separate boxes and those have to be emptied separately. I vaguely*

>> *remember a math formula placed on Nim game and this math formula*

>> *showing why second player will always win in OS of Nim.*

>>

>> *But my technique would predict that a morphed game of Nim exists*

>> *where the OS is a draw. This morphed game is every bit a game of*

>> *VonNeumann gametheory just as regular Nim is. But the difference is*

>> *that this morphed game of Nim is a \*\* draw in OS \*\* and not a sure*

>> *win for second player.*

>

> *How do you draw in a game where there is progress made in every move*

> *and the last one to pick an object loses?*

>

Simple! Start with aleph-naught lines and each move consists of erasing a finite number of lines.