

sci.logic: Re: Nim morphs that have draws Re: There exists a Nim version that is a "draw" OS

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

*Source:* <http://sci.tech-archive.net/Archive/sci.logic/2004-07/1196.html>

---

*From:* Archimedes Plutonium ([a\\_plutonium\\_at\\_iw.net](mailto:a_plutonium_at_iw.net))

*Date:* 07/10/04

Date: Sat, 10 Jul 2004 00:43:40 -0500

Sat, 10 Jul 2004 00:07:11 -0500 Archimedes Plutonium wrote:

- >
- > *question for Gametheory, on whether you can have a VonNeumann game where*
- > *either first mover or second mover can win in the OS of that game yet still*
- > *the game has no draws???*
- >
- > *Very tough question.*
- >
- > *And further, that another Nim-morph exists where it actually has draws in the*
- > *game itself and that the OS of this Nim-morph is a draw.*
- >

Tinkering around a little bit, I may have the answers to the above. Question first: can you have dice rolled in tictactoe or Nim and still have the games under VonNuemann Game theory?? If so, then here is a Nim morph that satisfies the above condition where either second player or first player can win and yet no draws and a \*draw OS\* And a morph for Tictactoe that has either first player win or second player win and yet no draws within the game itself.

Nim-morph rule: at the end of the game you roll a dice and if the dice comes up 4 or higher then the last person to pull off the object loses but if the dice rolls 3 or lower then the person who pulls off the last object wins.

Tictactoe-morph rule: at the end of the game you roll a dice and if 4 or higher then the 3 in a row player wins but if 3 or lower on the dice then the non-3 in a row player wins. If in case both players have non-3 in a row then the one who does not have two-in-a-row wins. This tictactoe morph, provided it is a VonNeumann Gametheory game especially because it introduces dice roll probability. Would be an example of where either player can win and the OS is a win yet the game has no draws.

I have the hunch that these are no longer VonNeumann games because of the dice probability introduction.

sci.logic: Re: Nim morphs that have draws Re: There exists a Nim version that is a "draw" OS

Archimedes Plutonium

[www.archimedesplutonium.com](http://www.archimedesplutonium.com)

[www.iw.net/~a\\_plutonium](http://www.iw.net/~a_plutonium)

whole entire Universe is just one big atom where dots  
of the electron-dot-cloud are galaxies