
From: SB (Serguei Belousov) <[REDACTED]>
Sent: Tuesday, January 23, 2018 2:03 AM
To: jeffrey E.
Subject: FW: bio computing and algebraic topology

-----Original Message-----

From: Коняев Андрей [mailto:[REDACTED]]
Sent: Monday, January 22, 2018 10:44 PM
To: SB (Serguei Belousov) [REDACTED]
Subject: bio computing and algebraic topology

Hi!

Looked over some articles, asked some fellow-mathematicians and this is what I have got (keep in mind that I don't fully understand what bio-computing means in this context).

The algebraic topology is used in computational models of protein folding. It's not new, but the progress in the field is quite slow. I believe there are no effective computational models here yet.

The other use of topology is study of graphs of organic compounds, drugs in particular. I have heard that there is some progress here, it is possible to do calculations here with some non-trivial results. In Russia there is a company called Biocad, that does that.

Finally the third topology use is neuroscience. It is something of this kind: <https://arxiv.org/pdf/1605.01905.pdf>

If there is a particular project, I think I can give more specific answer

Regards,

Andrei Konyaev

<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://www.apple.com/DTDs/PropertyList-1.0.dtd">

<plist version="1.0">

<dict>

<key>conversation-id</key>

<integer>34979</integer>

<key>date-last-viewed</key>

<integer>0</integer>

<key>date-received</key>

<integer>1516672969</integer>

<key>flags</key>

<integer>8590195717</integer>

<key>gmail-label-ids</key>

<array>

<integer>6</integer>

<integer>2</integer>

</array>

```
<key>remote-id</key>
<string>789505</string>
</dict>
</plist>
```