

# Papers<sup>y</sup>

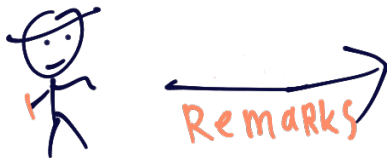
## Discussing board for scientific papers

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The screenshot shows a web browser window with the address bar containing 'papers-gamma.link/all/'. The page header includes the 'PapersV' logo and a navigation bar with the user name 'Sergey Kirgizov' and links for 'Add paper / See catalog / Logout'. A search bar is also present.

The main content area features a star icon, the title 'A new graph density', the author 'Sergey Kirgizov @ LIP6.n', and the date 'July 4, 2013'. An 'Abstract' section follows, containing a paragraph of text about graph density definitions.

A 'Contents' table is provided, listing sections like 'Background and motivation', 'True graph density', and 'Possible applications' with their respective page numbers.

The right sidebar contains 'Some comments' from 'Sergey Kirgizov', including a note about community definitions and a simple 'up!' comment.

**PapersV** Sergey Kirgizov | Add paper / See catalog / Logout  
Search  Go!

☆ A new graph density  
Sergey Kirgizov @ LIP6.n  
July 4, 2013

**Abstract**

For a given graph  $G$  we propose the non-classical definition of its true density:  $\rho(G) = \text{Mass}(G)/\mathcal{W}(G)$ , where the  $\text{Mass}$  of the graph  $G$  is a total mass of its links and nodes, and  $\mathcal{W}(G)$  is a size-like graph characteristic, defined as a function from all graphs to  $\mathbb{R} \cup \infty$ . We show how the graph density  $\rho$  can be applied to evaluate communities, i.e. "dense" clusters of nodes.

**Contents**

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1.1	$\text{Mass}(G)$	2
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0 Background and motivation

Take a simple graph  $G = (V, E)$  with  $n$  nodes and  $m$  links. The standard definition of graph density, i.e. the ratio between the number of its links and the number of all possible links between  $n$  nodes, is not very suitable when we

**Some comments:**

[Sergey Kirgizov:](#)  
A small and not very serious note that I wrote when I realized that anyone should have his own definition of [community](#).  
2015-01-05 01:19:25

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[Sergey Kirgizov:](#)  
up!  
2015-03-26 00:20:50

# So, what is Papers<sup>y</sup> ?

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- ◆ Library of papers/preprints written by you
- ◆ Comfortable place to discuss articles/preprints
- ◆ List of papers/preprints that you like

# Simple and ready to hack!

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	Lines of Code
HTML+JS	1000
Python	800
CSS	520
SQL	100
Shell	31
	<hr/>
	2500

<https://github.com/kerzol/papers>

Local installations can be used as personal or intra-team libraries

# Thanks to

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Marked





# TODO

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- ◆ delete/edit papers/comments
- ◆ follow, unfollow buttons
  
- ◆ better search
- ◆ private posts
- ◆ recommendations
- ◆ arxiv/hal/google scholar integration

...

<https://github.com/kerzol/papers/blob/master/TODO>

# Merci beaucoup

<http://papers-gamma.link>