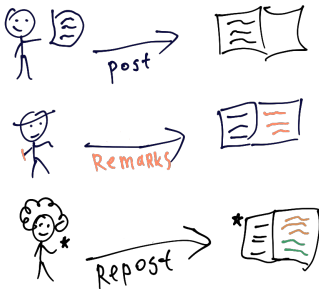


Papers^v

Discussing board for scientific papers

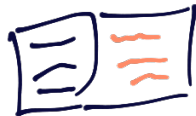
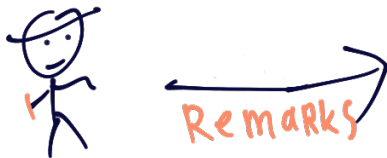


Sergey Kirgizov

Le2i, Université de Bourgogne, Dijon

Paris, 26 Mars



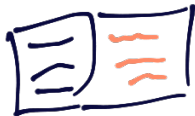




post



Remarks



Repost



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 menu with 'Sergey Kirgizov | 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, describing a non-classical definition of graph density. Below the abstract is a table of contents with sections: '0 Background and motivation' (1), '1 True graph density' (2), and '2 Possible applications' (4). The '1 True graph density' section is further divided into '1.1 $Mass(G)$ ' and '1.2 $\mathcal{W}(G)$ '. A 'Some comments:' section on the right contains two entries from 'Sergey Kirgizov', one dated '2015-01-05 01:19:25' and another dated '2015-03-26 00:20:50'.

PapersV

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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: $\rho(G) = Mass(G)/\mathcal{W}(G)$, where the $Mass$ 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 ρ can be applied to evaluate communities, i.e. "dense" clusters of nodes.

Contents

0	Background and motivation	1
1	True graph density	2
1.1	$Mass(G)$	2
1.2	$\mathcal{W}(G)$	2
2	Possible applications	4

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

[Sergey Kirgizov:](#)

up!

2015-03-26 00:20:50

So, what is Papers^y ?

- ◆ 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!

	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



Marked



TODO

- ◆ 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>