Tweet Review

A network study on tweets about #PeerReview

Aliakbar Akbaritabar (Ali); Flaminio Squazzoni

University of Brescia

aliakbar.akbaritabar@unimi.it

@Akbaritabar; @Squazzoni
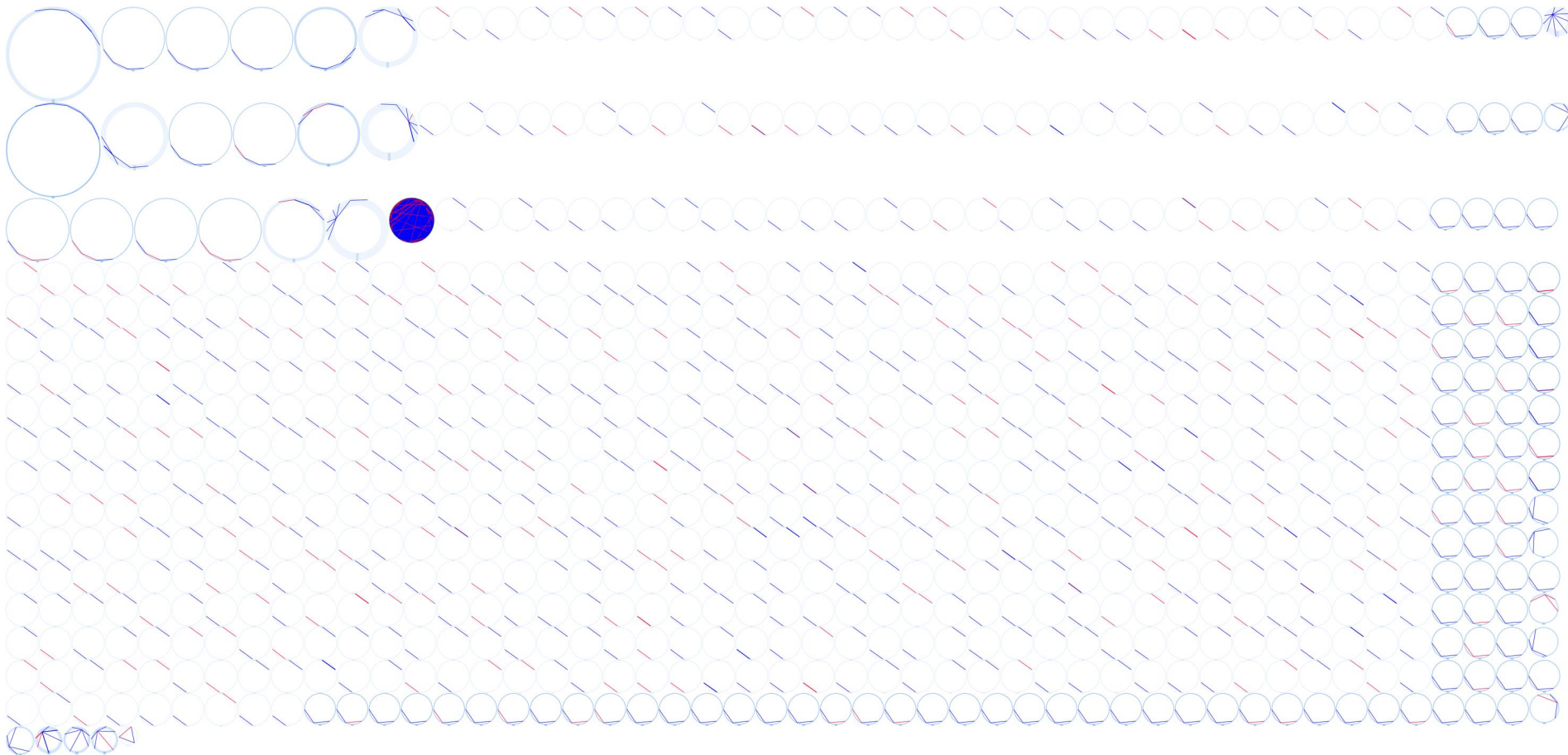
Data sources

- Starting Twitter profiles:
    - PEERe,
    - PeerReviewCongress,
    - PeerReviewWeek,
    - PeerReviewBotter,
    - Peer Review Watch

- Twitter API

- NodeXL academic license

Tweet Network:
Nodes: Twitter profiles (n = 5942)
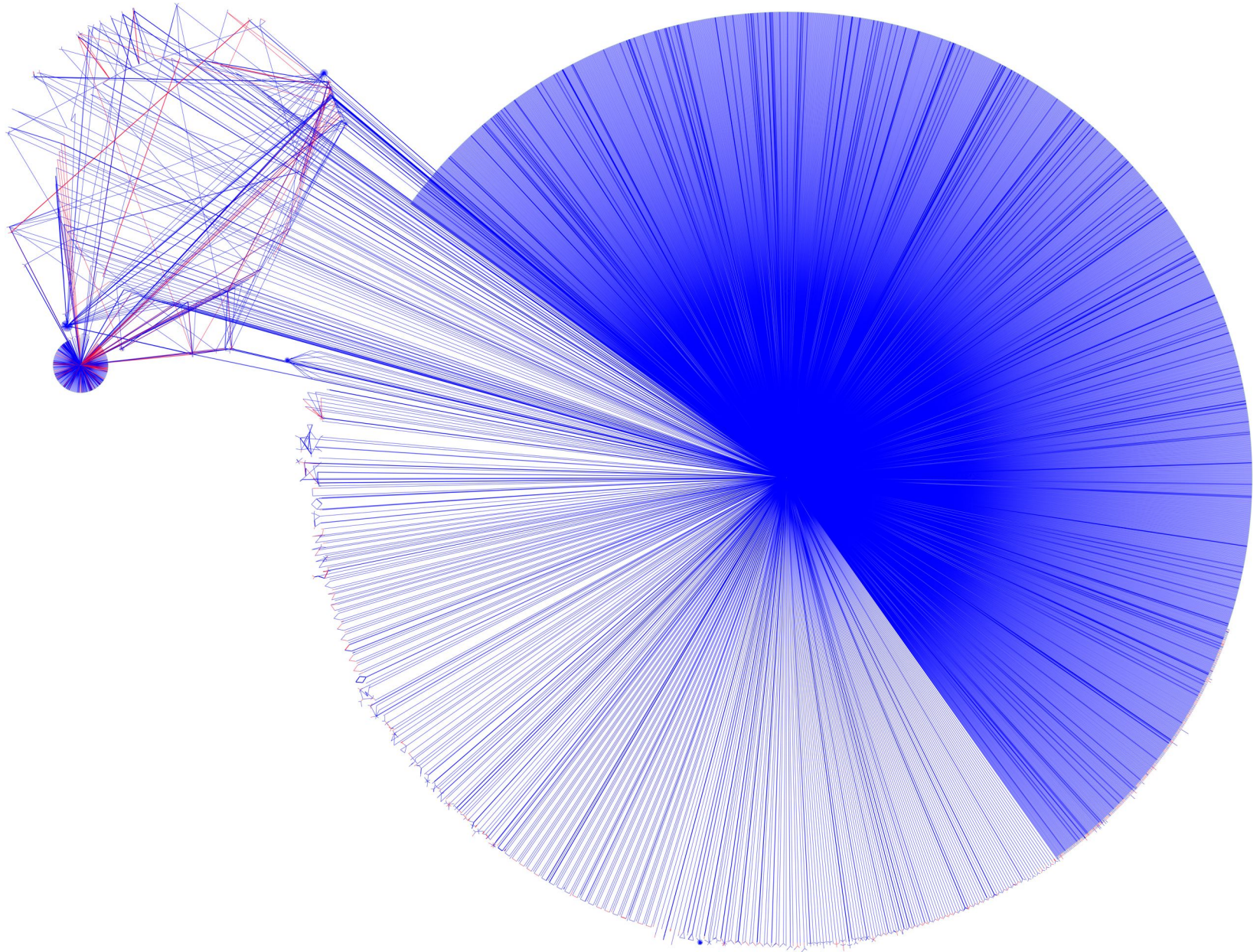Ties: mentions (Blue), replies (Red), (n = 6593)
Multiplex? Yes

Giant component (n= 4179)
Ties: mentions (Blue), replies (Red) (n=5555)
Multiplex? Yes

Hashtags Co-occurrence map:
Hashtags used in all tweets
A cluseter of hastags appearing with #PeerReview

Hashtags Co-occurrence map :
- Zoomed in to #PeerReview cluster (extracted from graph on left)
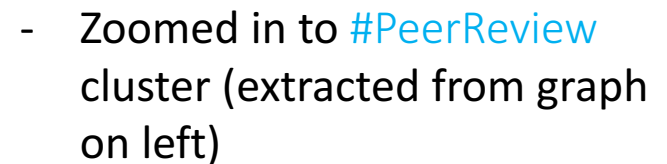
STM (**Structural Topic Modelling**) to find out main conceptual frameworks shared between tweet corpus which didn't yield much clear and contrasting concepts, but in case of hashtags used in tweets, it yielded interesting results! Below 10 most probable topics (or themes) with 7 highest probable word samples and 7 least overlapping words

Topic	Least overlap with other topics (frex)							Highest probability in topic						
	Word 1	Word 2	Word 3	Word 4	Word 5	Word 6	Word 7	Word 1	Word 2	Word 3	Word 4	Word 5	Word 6	Word 7
1	openscience	acadape	transparency	scicomm	openuphub	peerreview	altmetrics	peerreview	openscience	scicomm	transparency	acadape	altmetrics	openuphub
2	prc	prwdebate	peerreviewhaiku	peerrevwk	preprint	scirev	research	prc	prwdebate	peerrevwk	peerreviewhaiku	openaccess	scirev	preprint
3	accesstoresearch	journals	sentinelsofscience	csftrust	srukevents	assa	ebook	accesstoresearch	sentinelsofscience	journals	csftrust	srukevents	assa	essa
4	cardano	cryptocurrency	ada	bitshares	dpos	eos	ico	transparencyinreview	cardano	datasharing	preprints	clinicaltrials	coi	cryptocurrency
5	publishing	phdchat	rct	advocacy	peerreview	academia	patientrights	peerreview	publishing	phdchat	rct	patient	academia	ecrchat
6	ensreg	akw	peerreview	patient	publishing	rct	blockchain	peerreview	ensreg	akw	patient	publishing	gender	rct
7	aiascs	ancmakers	peerreview	spin	mla	aha	storify	peerreview	aiascs	ancmakers	spin	patient	storify	gradschool
8	evidence	success	joinus	nihr	ape	science	peere	peerreview	science	peere	success	evidence	ehealth	joinus
9	publishing	phdchat	rct	camlibs	peerreview	academia	clpd	peerreview	publishing	phdchat	rct	patient	academia	ecrchat
10	chromosomal	cytological	peerreview	spin	riat	livestream	transparencyinreview	peerreview	chromosomal	cytological	spin	gradschool	transparencyinreview	patient