**Connective Action in European Mass Protest**
Eva Anduiza, Autonomous University of Barcelona

The paper analyzes the extent to which digitally networked action is making a difference in political involvement. Based on protest surveys for 57 demonstrations that occurred across 7 European countries between December 2009 and June 2011, we analyze the characteristics and the consequences of emerging mobilization patterns based on intensive use of online social networks and loose organizational affiliation. We find that protest events staged by coalitions based on social networks and loosely-coupled alliances make a difference in reaching previously uninvolved individuals and those with lower organizational engagement. Evidence of online social networks that enable individual linkages through the personalization of collective frames indicates a possible mechanism for this mobilization effect. These findings provide new evidence for the debate on the potential impact of internet use in reducing political inequalities.

**Birds of the Same Feather Tweet Together. Bayesian Ideal Point Estimation Using Twitter Data**
Pablo Barbera, New York University

Parties, candidates, and voters are becoming increasingly engaged in political conversations through the micro-blogging platform Twitter. In this paper I explore whether the structure of the social networks in which they are embedded has the potential to become a source of information about policy positions. Under the assumption that social networks are homophilic (McPherson et al., 2001), this is, the propensity of users to cluster along partisan lines, I develop a Bayesian Spatial Following model that scales Twitter users along a common ideological dimension based on who they follow. I apply this network-based method to estimate ideal points for Twitter users in the US, the UK, Spain, and the Netherlands. The resulting positions of the party accounts on Twitter are highly correlated with offline measures based on their voting records and their manifestos. Similarly, this method is able to successfully classify individuals who state their political orientation publicly, and a sample of users from the state of Ohio whose Twitter accounts are matched with their voter registration history. To illustrate the potential contribution of these estimates, I examine the extent to which online behavior is polarized along ideological lines. Using the 2012 US presidential election campaign as a case study, I find that public exchanges on Twitter take place predominantly among users with similar viewpoints.
Politicians Go Social. Estimating Intra-party Heterogeneity (and its Effects) through the Analysis of Social Media
Andrea Ceron, University of Milan and Alessandra Caterina Cremonesi University of Milan

Scholars have emphasized the need to deepen investigation of intra-party politics in order to assess the effect of internal heterogeneity on the party and the party system. However, estimating the preferences of intra-party actors (e.g., party factions) is often a difficult task. Recent works shown that quantitative text analysis of documents drafted by intra-party subgroups can be a solution, but this strategy relies on the existence of such documentation. The striking rise of social media provides a substitute for that. In fact, politicians belonging to different party factions feel free to express their sincere preferences on social media (blogs) or social network sites like Facebook and Twitter. Taking advantage of these publicly released statements, we are able to assess the policy position of factions within the Italian Democratic Party (PD). Focusing on the 2012 centre-left Primary election, we show that factional heterogeneity measured through content analysis of social media helps explaining the politician’s choice to endorse or criticize one or the other of the two PD candidates running for the nomination.

Cognitive Democracy and the Internet
Henry Farrell, George Washington University and Cosma Shalizi, Carnegie-Mellon/The Santa Fe Institute

In this paper, we lay out the core arguments for an approach to democratic theory that we dub 'cognitive democracy,' and apply it to understanding the democratic potential of the Internet. Our baseline is fundamentally pragmatist - we start from the supposition that institutions are justified by their usefulness for pursuing (and, as justified by experience, reconsidering) our collective ends as a society. We combine this starting point with the results of a burgeoning new literature in order to understand the circumstances under which social arrangements can promote or impede the pursuit of useful knowledge. To be more precise, we look at various forms of information processing on the Internet as forms of _collective cognition_ - collective processes that are more or less successful in bringing together understandings of the world so as to produce useful political knowledge. Our arguments begin with the question of how different arrangements bring different viewpoints together. New work in cognitive science allows us to understand how such contact can contribute to collective problem solving. However, the question of whether specific forms of social activity on the actually-existing Internet does or does not promote such contact is an open research question. We conclude by setting out a research agenda for understanding the Internet as a set of field experiments in information processing, from which we can gather provisional results that we can then apply to improve democratic arrangements.
The Rise and Decline of the “Occupy Wall Street” Movement from a Digital Perspective
Alessandro Flammini, University of Indiana

The adoption of online social media to ease communication related to politics, policy and social protest has recently emerged as a prominent social phenomenon. By analyzing a high-volume, fifteen-month long dataset captured from Twitter, we provide a quantitative perspective on the birth and evolution of the U.S. anti-capitalist movement known as “Occupy Wall Street”. We studied communication patterns on Twitter among users who have shown some degree of interest in the OWS movement before, during and after the movement itself. The goal was to describe how participating in the movement has changed individual engagement in politics related issues, patterns of activity and social connectivity.

Our findings show that OWS has elicited participation mostly from users with pre-existing interests in domestic politics and foreign social movements. OWS went through a short initial "explosive" phase, with high peaks of activity, and a dramatic decrease of volume shortly after. Online activity was strongly correlated with "on the ground events" focused on organizational aspects more than collective framing. After the "high-activity" phase of the movement, we observe that user inter-connectivity and interests have remained mostly unchanged.

The Bridges and Brokers of Global Campaigns in the context of Social Media
Sandra González-Bailón, Oxford Internet Institute, University of Oxford

In May of 2011 a political movement emerged in Spain that, under the influence of the Arab Spring, occupied the squares of dozens of cities as a protest against policy reactions to the financial crisis; a few months later, the Occupy movement erupted in New York, borrowing some of the tactics of the Spanish protesters and taking the message of discontent against the financial system to a global scale. In May of 2012, the Spanish protesters went to the streets again to celebrate the first anniversary of the first mass demonstrations, this time as part of the global Occupy campaign. Protesters and media reporters converge in their view that social media play a significant role in the rapid growth of these mobilizations and in their internationalization; however, there are still many open questions about how online networks facilitate communication and, in particular, about how they integrate local flows of information. We examine this question using data from Twitter communication, sampled over a month in 2012, coinciding with the first anniversary of the Spanish (15-M) movement. Using the publicly available API, we collected about half a million messages containing information related to the Occupy and the 15-M campaigns. We reconstruct networks of communication using RTs and mentions, and we analyze the level of integration of information flows, shedding light on the users that act as the brokers in this communication exchange. Our findings help assess claims about the instrumental role of online networks in the dissemination of protest information and, more generally, about collective action in the digital age.
Mobilizing Online Data to Understand Offline Mobilization: Two Attempts at Online Observational Research in Russia
Samuel A. Greene, King’s College London

This presentation reviews the strengths and weaknesses of two recent attempts to use data collected from online social media to understand the structures and agents of the recent protest wave in Russia. Beginning in December 2011 and lasting, in its active phase, for approximately six months, Russia’s recent protest wave surprised politicians, participants and analysts alike, none of whom saw it coming and few of whom could predict its outcome. Events on the Russian street challenged many prior notions about the nature of public opinion, the social contract and mobilizational structures in Russia, forcing political scientists and sociologists to go back to the drawing board. Online social media were demonstrably important in the organization and coverage of the protest events, but they also provided an opportunity for researchers to observe certain kinds of behavior and social interaction directly. Two such attempts were undertaken by the author: In the first, data from Twitter were used to identify structures of communication, and to ask how the medium was used by various proponents and opponents of the movement. In the second, data from Facebook were used to identify protest-related communities, and to ask where new protest constituencies came from. In both cases, a secondary motive was to understand how the use of Twitter and Facebook data might illuminate offline phenomena. Both projects did lead to useful, and in some ways counterintuitive, empirical results, finding an unexpectedly powerful role for professional journalists in framing the movement, and undermining earlier assumptions about the mobilization of a previously apolitical ‘hipster’ constituency. But the limitations of the technology and the opportunism of the methods raise serious questions about the degree to which these findings and their broader theoretical implications may ‘travel’, both across borders and over time.

Every Tweet Counts? How Sentiment Analysis of Social Media can Improve our Knowledge of Citizens’ Policy Preferences. An Application to Italy and France
Stefano Maria Iacus, University of Milan and A. Ceron, L. Curini and G. Porro

The growing usage of social media by a wider audience of citizens sharply increases the possibility of investigating the web as a device to explore and track political preferences. In the present paper we apply a method recently proposed by other social scientists to three different scenarios, by analyzing on one side the online popularity of Italian political leaders throughout 2011, and on the other the voting intention of French Internet users in both the 2012 presidential ballot and the subsequent legislative election. While Internet users are not necessarily representative of the whole population of a country’s citizens, our analysis shows a remarkable ability for social media to forecast electoral results, as well as a noteworthy correlation between social media and the results of traditional mass surveys. We also illustrate that the predictive
ability of social media analysis strengthens as the number of citizens expressing their opinion online increases, provided that the citizens act consistently on these opinions.

**Social Networks, Peer Pressure and Protest Participation**
Alexey Makarin, New Economic School in Moscow (co-authors: Ruben Enikolopov, Maria Petrova and Leonid Polishchuk)

Social incentives often shape people’s behavior. Recent research shows that social motivation matters for electoral participation or charitable activities. In this paper, we investigate whether social incentives are similarly important for taking part in political protest. Specifically, we conduct two types of analysis. First, using a list experiment in a survey of Russian protest participants, we show that social motivation is important for people in offline and online social networks. Second, we show that participation in protests across the country was associated with higher stocks of social capital, civic culture, and interrelatedness in social networks. Finally, we propose a theory, which relates a stronger peer effect to adjusted expectations of the participation incentives of social network members, and present evidence supporting such theory.

**Politics 2.0: The Multifaceted Effect of Broadband Internet on Political Participation**
Francesco Sobbrio, European University Institute (joint with Filipe Campante (Harvard Kennedy School of Government) and Ruben Durante (Sciences Po))

We investigate the impact of the diffusion of high-speed Internet on different forms of political participation, using data from Italy. We exploit differences in the availability of ADSL broadband technology across municipalities, using the exogenous variation induced by the fact that the cost of providing ADSL-based Internet services in a given municipality depends on its relative position in the pre-existing voice telecommunications infrastructure. We first show that broadband Internet had a substantial negative effect on turnout in parliamentary elections between 2001 and 2008. However, we also find that it was positively associated with other forms of political participation, both online and offline: the emergence of local online grassroots protest movements, and turnout in national referenda (largely opposed by mainstream parties). Most interestingly, we find that the negative effect of Internet on turnout in parliamentary elections is essentially reversed after 2008, when the local grassroots movements coalesce into the Five-Star Movement (M5S) to run in parliamentary and local elections. Broadband availability has a positive impact on the electoral performance of the M5S and of other “web-friendly” parties, to the detriment of pre-existing forces. Our findings are consistent with the view that: 1) the effect of Internet availability on political participation changes across different forms of engagement; 2) it also changes over time, as new political actors emerge who can take advantage of the new technology to tap into the existence of a disenchanted or demobilized contingent of voters; and 3) these new forms of mobilization eventually feed back into the mainstream electoral process.
Is the Internet Good or Bad for Politics? Yes. Let's talk about How and Why
Zeynep Tufekci, University of North Carolina, Chapel Hill

There has been a good deal of public conversation as well as academic papers debating the positive and negative impacts of social media on politics, movements and social change. This debate has mostly been taking place at the level of the warring anecdotes for journalists and conflicted case studies for academics. While anecdotes and case studies are useful, they do not get at the core question of how Internet’s affordances which alter the socio-political architecture of connectivity, visibility, persistence, temporal and spatial structures among other features, interact with societal mechanisms which affect social and political dynamics such as homophily, polarization, reconfiguration of collective action, remixing of public and private spheres, erosion of practical obscurity, bridging, cascades, and altered gate-keeping, pluralistic ignorance and citizen broadcast and journalism, among others. In this paper, I describe and broadly define these interactions between affordances and social and political mechanisms and use examples including the Arab Spring, the anti-vaccination movement, Occupy, China and elsewhere to outline a theory of Internet, sociality and political change.

Follow the leader! Dynamics and Patterns of Activity among the Followers of the Main Italian Political Leaders during the 2013 General Election Campaign
Cristian Vaccari and Augusto Valeriani (University of Bologna)

Politicians can communicate with citizens on social media in essentially two ways: directly, through messages that they broadcast to those users who “follow” or “like” them on a given platform, and indirectly, through messages that their supporters get from them and autonomously re-circulate to their own contacts on social media. Whereas the potential for direct communication lies essentially in the numbers of people who follow a politician on social media, the potential for indirect communication depends on how active, engaged, and connected the people are who follow that politician. This paper aims to shed light on these issues by investigating the levels of activity (number of tweets sent) and audiences (number of followers) of Twitter users who followed ten national party leaders during the Italian 2013 general election campaign. Analysis of more than 2 million accounts show that the vast majority of Twitter users who follow Italian politicians are rather inactive and have very small followings. Moreover, there is a negative relationship between the number of followers a politician has and their levels of activity, so that the most popular politicians have on average the least active and popular users, and vice versa. Users’ activity and followings are also very unevenly distributed, with very tiny minorities accounting for the vast majority of tweets and followers. While most Twitter political users thus seem to be relatively obscure lurkers, only a selected few have the potential to be influencers. We analyze who these “power users” are through a content analysis of their Twitter biographies, through which we find that most of them are celebrities in realms other than politics or people who are already highly visible in the politics-media ecosystem. These findings
suggest that a “politics as usual” framework best describes the dynamics of potential influence on Twitter, at least as regards the audiences that connect with national political leaders.