

Emerging Methods and Tools for Sparking New Global Creative Networks



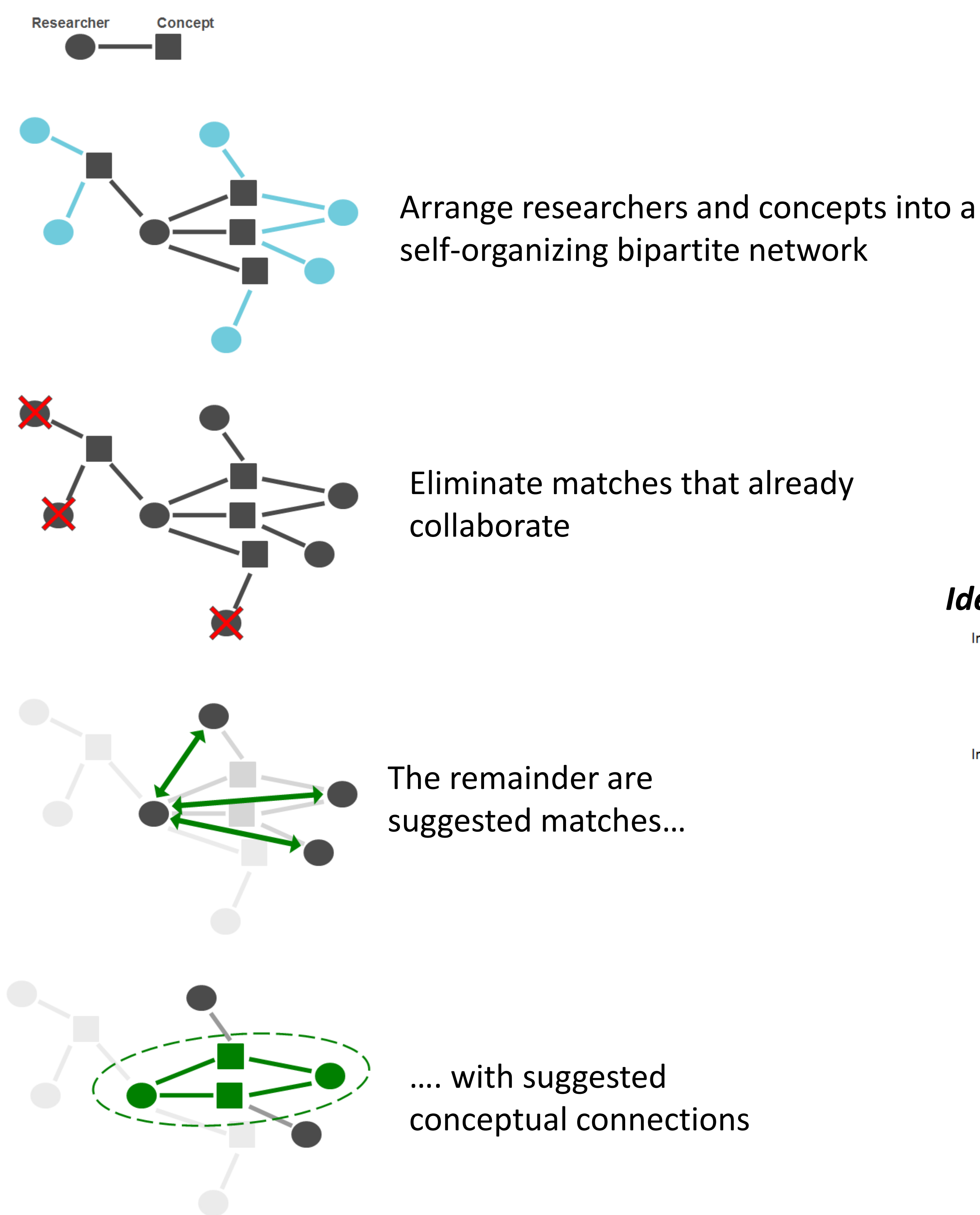
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Abstract

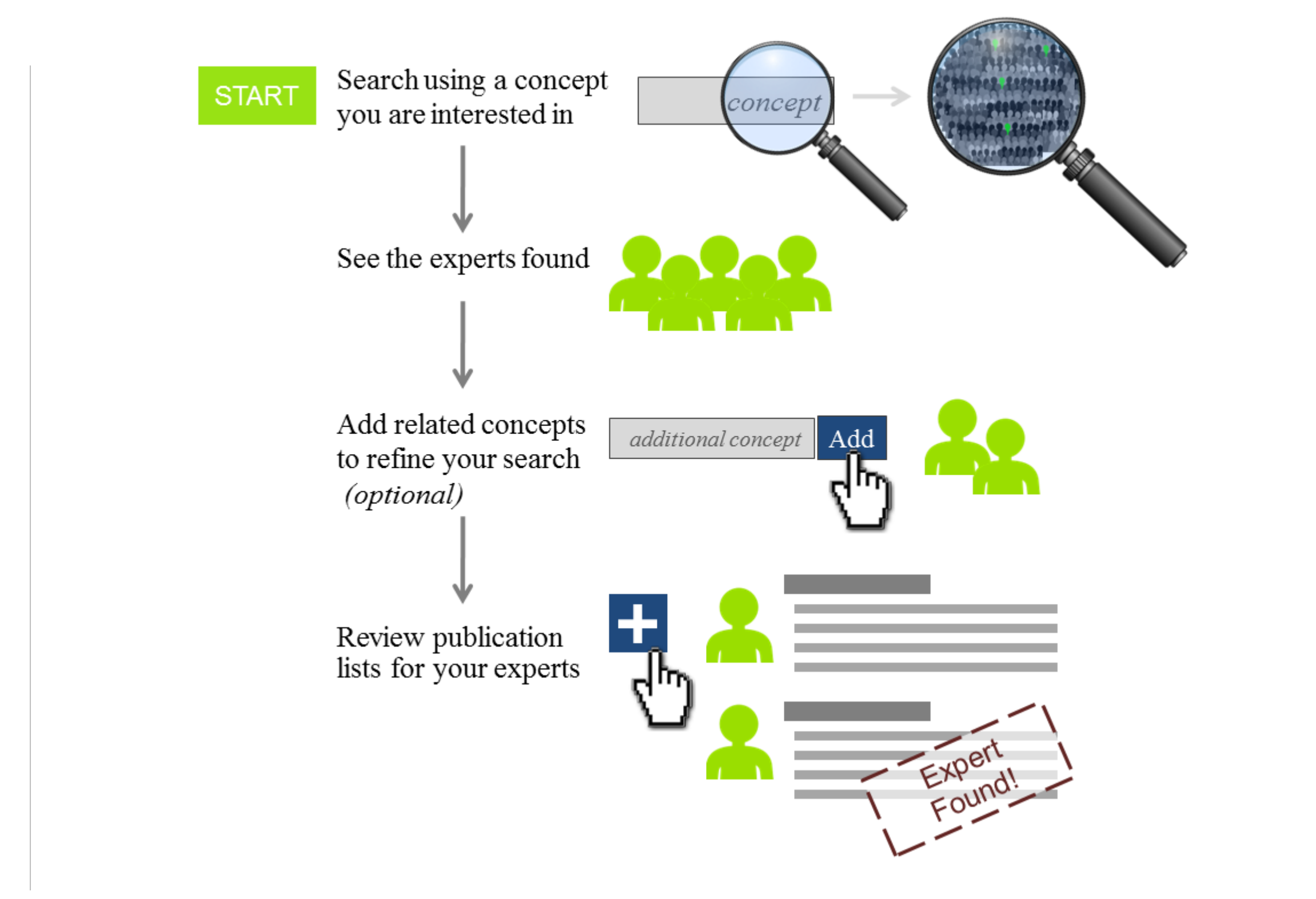
Emerging methods and tools are changing the ways participants in global creative networks become aware of each other and proceed to interact. Some web-based resources intended to spark new collaborations in creative networks have been plagued by dependence on fragmented or out-of-date information, having shallow recall (e.g. limited to a list of manually curated keywords), offering poor interconnectivity with other systems, and/or obtaining low end-user adoption. Increased availability of information about creative network participants' activities and outputs (e.g. completed sponsored research projects and published results, aggregated into global databases), coupled with advancement in information processing techniques like Natural Language Processing, enables new web-based technologies for discovering subject matter experts, facilities, and networks of current and potential collaborators. Large-scale data resources and NLP allow modern versions of these tools to avoid the problems of having sparse data and also provide for deep recall across many disciplinary vocabularies. These are "passive" technologies, from the perspective of the network participant, because the agent must undertake an action to use the information resources. Emerging "active" methods and tools utilize the same types of information and technologies, but actively intervene in the formation of the creative network by suggesting connections and arranging virtual or physical interactions. Active approaches can achieve very high end-user adoption rates. Both active and passive methods strive to use data-driven approaches to form better-than-chance awareness among networks of potential collaborators. Recent case studies suggest the existence of repeatable strategies for facilitating data-driven matching and better-than-chance interactions designed to spark new global creative networks.

Active / Interventional Networking Methods

Identification via mining network structures



Passive Networking



Identification via survey / self-identification

Indicate interests
 A
 B
 C

Indicate methodological expertise/needs

Method	Can Provide	Need	Not Interested
D	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hello _____
 ... based upon survey responses, we would like to suggest that you meet:

Name: _____
 Institution: _____

Can provide expertise in: **E**
 Seeks an expert in: **D**
 Shares a common interest in: **B**

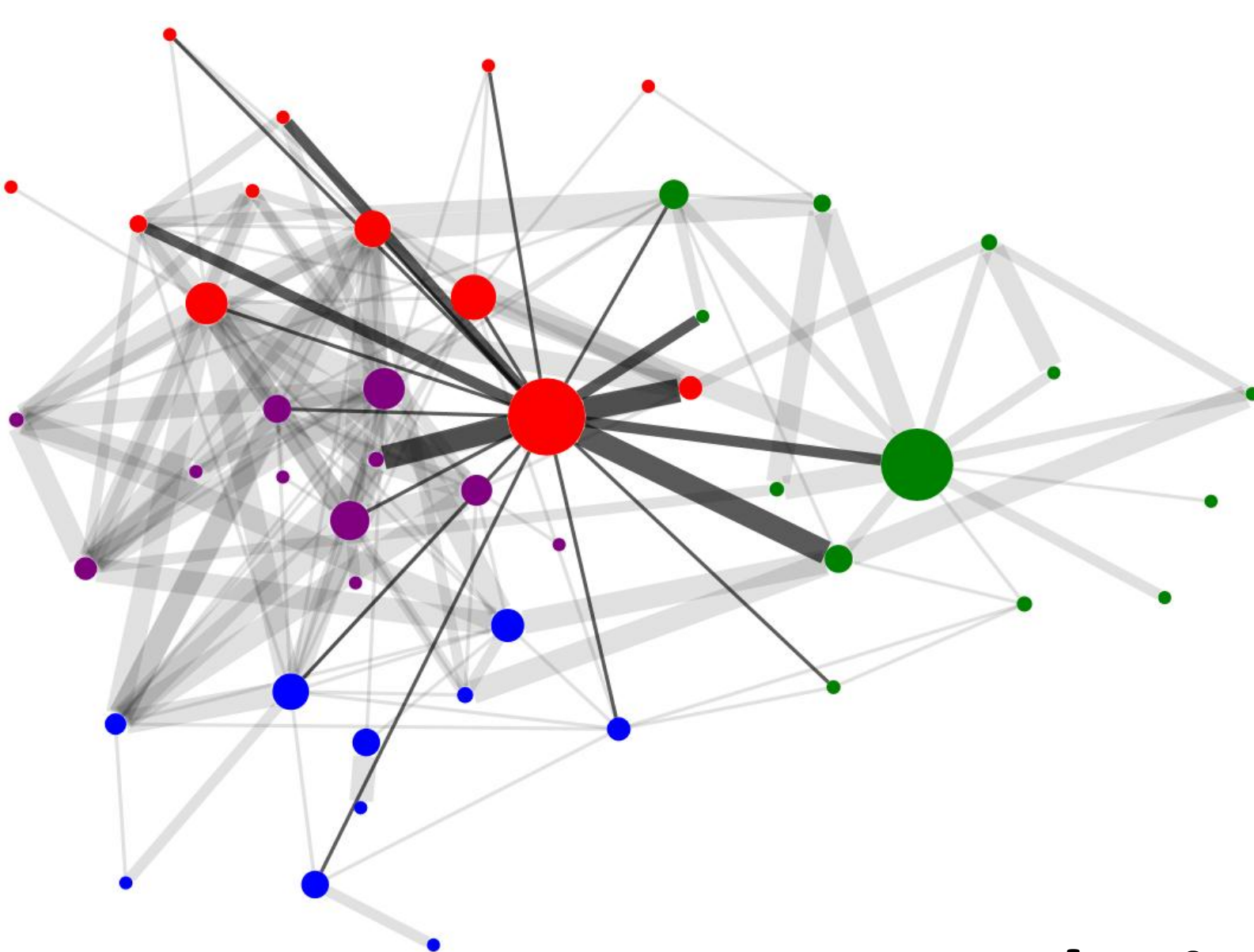
Participants specify interests, expertise, and needs (often discipline-specific)

Score potential matches

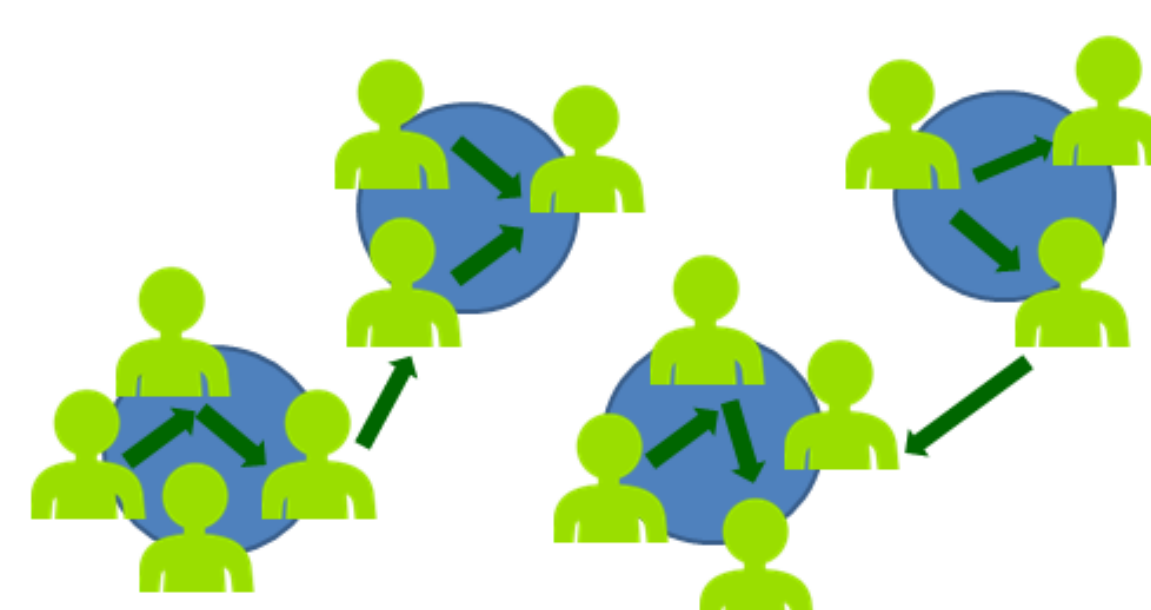
Issue recommendations

Outcomes

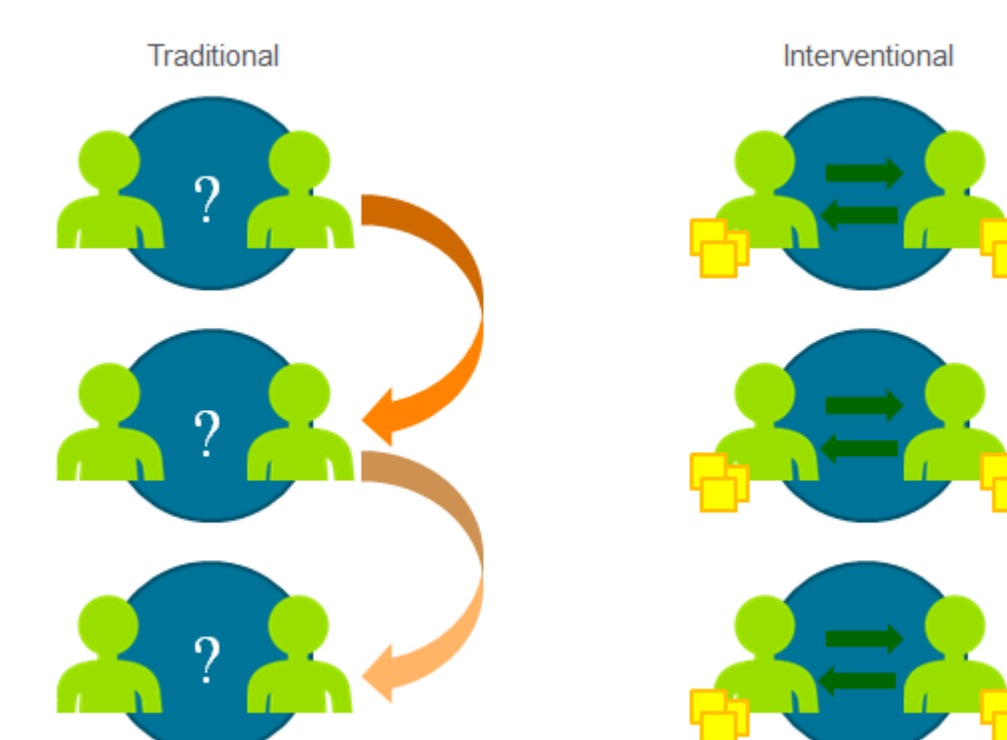
Team design for team science



Suggested casual interactions at physical events and



scheduled interactions at physical events



Conclusions

These emerging methods and tools suggest the existence of repeatable strategies for facilitating data-driven matching and better-than-chance interactions designed to spark new global creative networks. As these methods become further systematized and see wider adoption, they are poised to influence larger numbers of creative networks and their participants.

