### RISIS Training

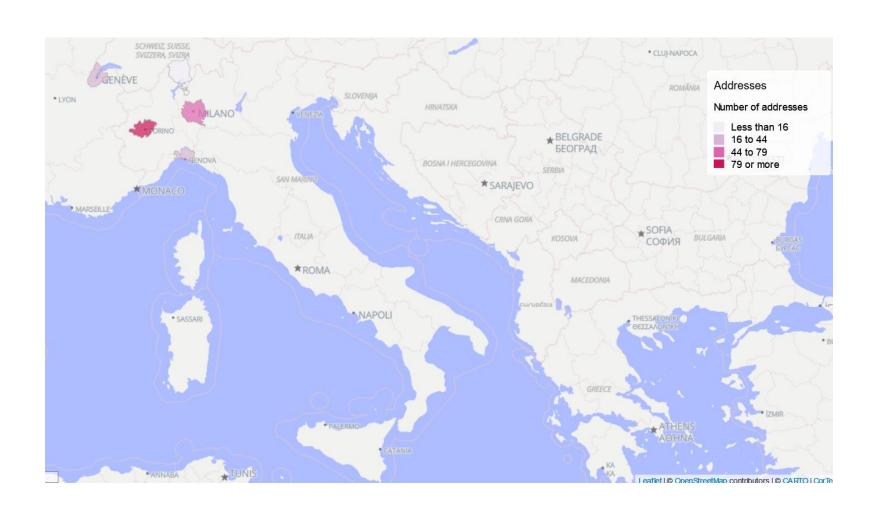
## Assessing Inventing activities of Italian firms and attractivity of Italian inventors?

Sihan Li (INGENIO, Spain)

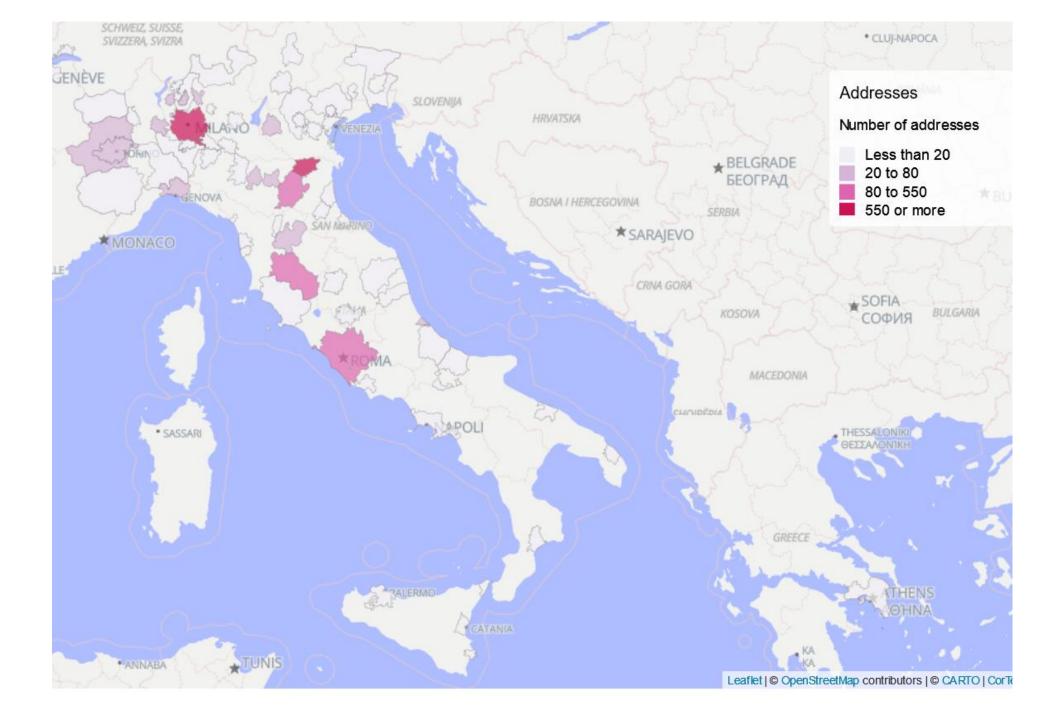
Gianluca Murgia (University of Siena, Italy)

Eleonora Pierucci (Roma Tre University, Italy)

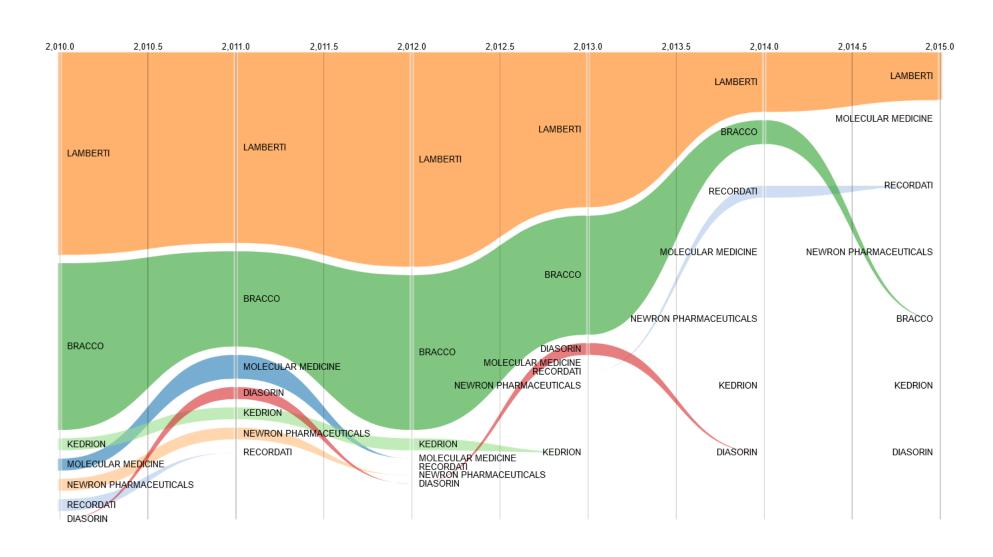
#### Location of Italian firms



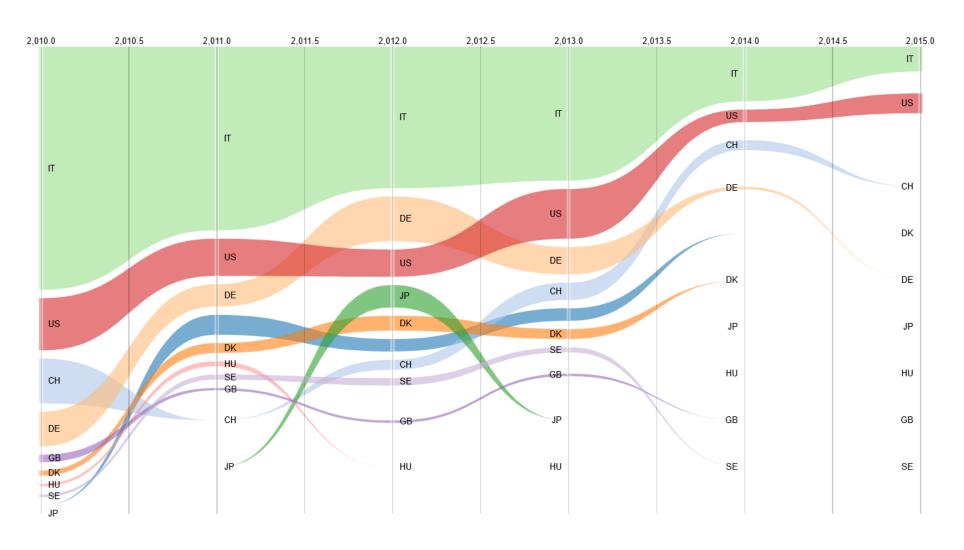
Italian inventors location



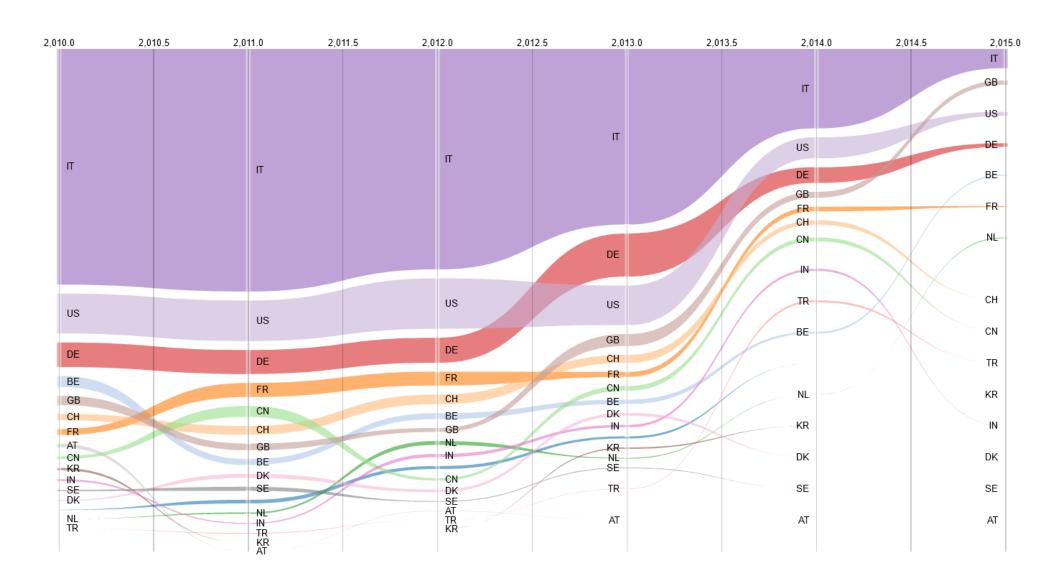
#### Number of patents filed by Italian firms per year



#### Location of inventors of patents filed by Italian firms



#### Location of inventors of patents with Italian inventors



#### Tech fields of Italian firms

2,010.0	2,010.5	2,011.0	2,011.5	2,012.0	2,012.5	2,013.0	2,013.5	2,014	.0 2,014.5	2,015.0
								Refractories		
Medical	Preparations	Ontical F	lements Systems		Optical Elements	Systems	Optical Ele	ements Systems		Disinfectants
		Optical L	lements Systems	Optical Ele	ements Systems			Paints and inks	Materials For Miscelland	eous Applications
0-41					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Optical	Elements Systems				H	Macror olography	mol withouth C-to-C Un	nsaturated Bonds <sup>Mac</sup>	cromol withouth C-to-C U	ood Vessel Filters
						g,		Surgery-Diagnosis	N.	hysical Analyses
Holograp	phy			Madiaal D				Macromol Comp		nic Digital Comput
				Wedical P	reparations hanic Digita	I Comput	Heterocy	yclic Compounds		Surgery-Diagnosis
Surgery	Diagnosis	Medical I	Preparations				laterials For Miscellane	ous Applications	Acyclic or 0	Carbocyclic Comp
Jan gol,				Holograph	Medical Pre	parations	Measuring Nucle	ar Or X-Radiation		Paints and inks
		Holograp	hy		Surgon	Diagnosis				Refractories
		Measurin	g Length Thickness		Surgery-	Magnosis	Blo	od Vessel Filters	Heteroc	cyclic Compounds
Devices	for Introducing Media in Body	Peptides		Blood Ves	sel Filters		Chem Pl	hysical Analyses	\/ \/\	Lighting
Donicoo	ior introducing integral in Body			Davissa fo	r Introducang specials F	er_Control	Mechani	ic Digital Comput	Med	dical Preparations
Nuclear	Eng.		ctiv Of Chem Comp		Carbocyclic Comp	Lighting	Acyclic or C	arbocyclic Comp	Arranger	ments For Control
Micro O	rga Enzymes Culture Media		ssel Filters vsical Analyses	,	entel Exclicontrolarbocy			Disinfectants	Compositions O	f Macromol Comp
	Activ Of Chem Comp	Stereosc	opic television systemsunds v					Lighting	Measuring	Length Thickness
	or Carbocyclic Comp		or Introducing Media in Body		es for Introducing Medi		Med	ICent Preparatetions Elts	s Other Than C H Haloge	en O N S Se or Te
	essel Filters	Lighting	ga Enzymes Culture Media		pic television layele las		Arrangem	nents For Control	\	Peptides
	ol withouth C-to-C Unsaturated	d BondsSurgery-I		Surgery-D	iagnosis Stereoscopic television	systems	Measuring I	ength Thickness	Micro-Orga Enzym	nes Culture Media
	ments For Control	Macromo Materials	l withouth C-to-C Unsaturated For Miscellaneous Applicatio	Bovids rombowite	asimitalisastanananananananananananananananananan	e6ipHaylogen O olielations Elec C	Other Than C H Haloger	n O N S So or To	9   1	lements Systems
Paints a Peptides		Mechanio	Digital Comput	Macromol	Bigitaliscellaneomopp withoutheropopsisal	mared Bands	Striet Trial C TT Taloger	Double Double	Optical L	1
Stereos	copic television systems	D-ft	or Carbocyclic Comp nd inks	E dillico dillic		-ftt-		Peptides		Holography
Material Chem P	s For Miscellaneous Application	ons Disinfect	ants	Refractorie Disinfecta	nts Heterocyclic Co	mpounds	Micro-Orga Enzym			Nuclear Eng.
Mechani Refracto	hysical Analyses ic Digital Comput	Arrangen	nents For Control	Compositi	oua <u>กล่อมโคลูเลนค</u> อบอักมัน พิเดเซอลนใช้เกิมเลี้ยาสู่ เกลรเอเ	hickness		Nuclear Eng.	Therap Act	tiv Of Chem Comp
Disinfec		Composi	nes ants clic Compounds nents For Control tions Of Macromol Comp ids with Elts Other Than C H I	Measu <b>viri</b> g Se <mark>⊛hide</mark> sPalalala	orte Nuc	ire Media Ilear Eng.	Therap Acti	v Of Chem Comp	Stereoscopic to	elevision systems
Lighting		Nuclear E	ing.	Niicio-Oig	º _= Therap?Activeof on	efff Comp	Stereoscopic te	elevision systems	Devices for Introduci	ng Media in Body
Measuri Compou Measuri	itions Of Macromol Comp ng Length Thickness nds with Elts Other Than C H ng Nuclear Or X-Radiation	Measurin Halogen O N S S	g Nuclear Or X-Radiation Se or Te	Therap Ag Measuring	ng. tey of Chem Compor X- Nuclear Or X-Radiatio	Radiation	Devices for Introducir	ng Media in Body	Measuring Nucle	ear Or X-Radiation

#### Tech fields of Italian inventors

2,010.0	2,010.5	2,011.0	2,011.5 2,0	012.0 2	2,012.5	2,013.0 2,		014.0 2,014.5 2,015.0 Use of Cosmetics
Macrom	ol with C-to-C Unsaturated Bon	ds Medical Prepara	tions	Medical Preparation	Medical Preparatio	ns Macromol withouth C-to Macromol with C-to	Medical Preparations o-C Unsaturated Bonds o-C Unsaturated Bonds	Therap Activ Of Chem Comp Disinfectants
Medical	Preparations	Macromol with C	c-to-C Unsaturated Bonds		to-C Unsaturated Bon Layered Produc o-C Unsaturated Bond	Inorg Or Non-	Semiconductor Devices Macromol Organ Subst Detergent Compositions	Macromol with C-to-C Unsaturated Bonds
Compos	itions Of Macromol Comp		uth C-to-C Unsaturated Bo	Macromol withouth C-	to-C Unsaturated Bon Systems Detergent Compositio	ds Acycli	Batteries and related	Detergent Compositions
Therap /	Activ Of Chem Comp	Therap Activ Of Batteries and rel			ni <mark>Cote</mark> Calଧରତ୍ରେଧାୟତ୍ତ୍ର ବ୍ୟାର୍ <sub>ମ</sub> ୍ବର Macromol Cor	β <sub>g</sub> nds Ch	nem Physical Analyses	Medical Preparations
	or Carbocy <mark>cli</mark> c Comp nt Compositions		Macromol Comp	Batteries and relat	Blood Vessel Filte ed Batteries and relat	ers Thera	p Activ Of Chem Comp	
	Non-Macromol Organ Subst ol withouth C-to-C Unsaturated		cromol Organ Subst Processes	Refractories Opt	Nacromol Coisinfectar tical Elements Syster cesses Of Compoundi	ms no	Refractories	Blood Vessel Filters
Process	es Of Compounding volic Compounds	Methods For Ste	erilising	Working of Plastic There New Plants	ap Activ Of Chem Cor Methods For Sterilisi	mp ng	Working of Plastics Layered Products	Refractories
	Products	Blood Vessel Fil Working of Plast		Lavered Products	herurRhysical Analys leterocyclic Compoun Cosmetic Preparationem Comp	ds	Blood Vessel Filters m and Phys Processes	
Methods Batterie	essel Filters For Sterilising and related	Acyclic or Carbo	S	Inorg Or Non-Macr Acyclic or Carboc Blood Vessel Filte	Cosmetic Preparation Properties Properties Properties Properties Properties Properties Preparation Pre	cs es	Methods For Sterilising Use of Cosmetics	
Optical Working	nd Phys Processes Elements Systems of Plastics	Disinfectants  Detergent Comp		Heterocyclic Comp Chem and Phys P Cosmetic Prepare			Polishing Compositions Cosmetic Preparations	
New Pla Refracto		Optical Element Use of Cosmetic Chem Physical	s Analyses	Disinfectants Semiconductor De Use of Cosmetics Polishing Compos Chem Physical Ar	evices Use of Cosmeti itions New Plan		New Plants Disinfectants	,,
Polishin Use of Cosmet	g Compositions osmetics c Preparations es Of Natural Macromolecules	Cosmetic Prepa Semiconductor I Polishing Compo Refractories	Devices	Methods For Steri	nalyses I <b>Sonig</b> shing Compositio Natu <b>va</b> dovbarondercollecsul	·	ical Elements Systems latural Macromolecules	
		New Plants Derivatives Of Na	atural Macromolecules					

#### Tech fields clusters of Italian firms

optical elements systems measuring length thickness holography mechanic digital comput stereoscopic television systems arrangements for control

polysaccharides compositions of macromol comp

materials for miscellaneous applications

medical preparations

nuclear eng. surgery-diagnosis

electrotherapy

/peptides

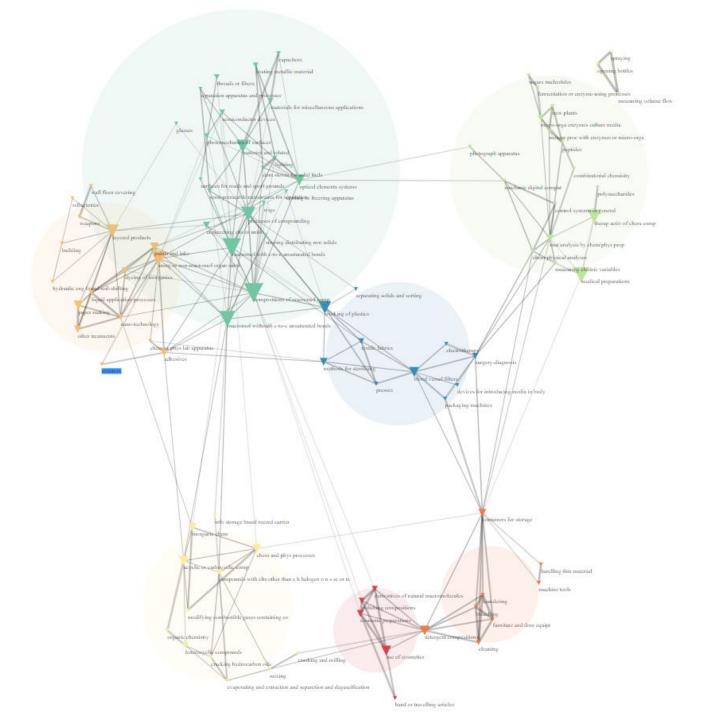
methods for sterilising

mat analysis by chem/phys prop combinatorial chemistry

measur proc with enzymes or micro-orga

devices for introducing media in body chem physical analyses

## Tech fields clusters of Italian inventors



clusters

Compounds with Elts Other Than C H Halogen O N S Se or Te & Chem and Phys Processes

Micro-Orga Enzymes Culture Media & Mat Analysis by Chem/Phys Prop

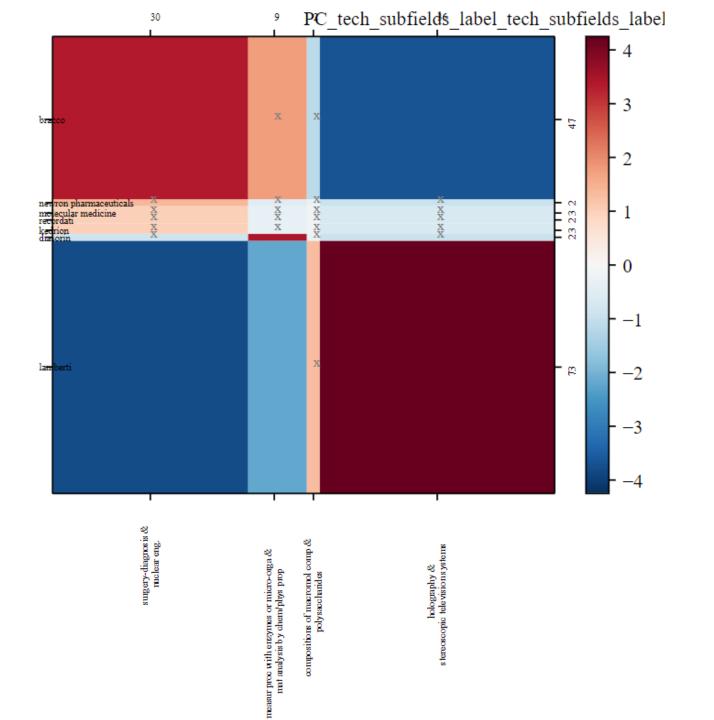
Processes Of Compounding & Macromol with C-to-C Unsaturated Bonds

siena - rural it grosseto it

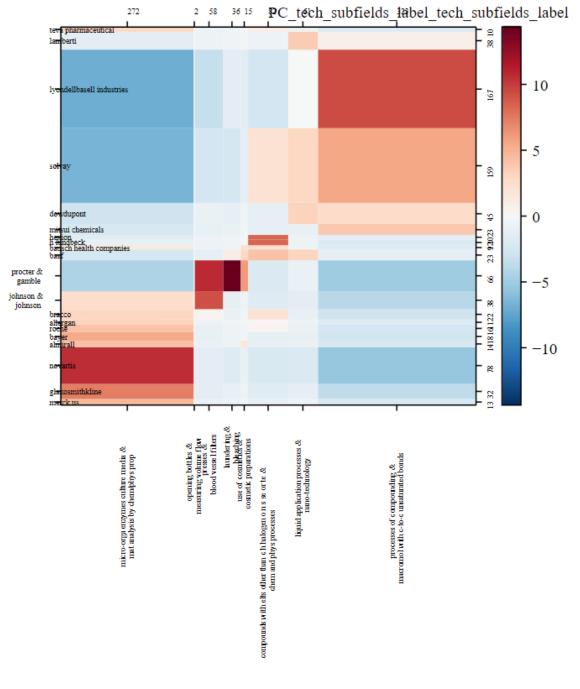
Micro-Orga Enzymes Culture Media & Mat Analysis by Chem/Phys Prop

Micro-Orga Enzymes Culture Media & Mat Analysis by Chem/Phys Prop Presses & Blood Vessel Filters Compounds with Elts Other Than C H Halogen O N S Se or Te & Chem and Phys Processes

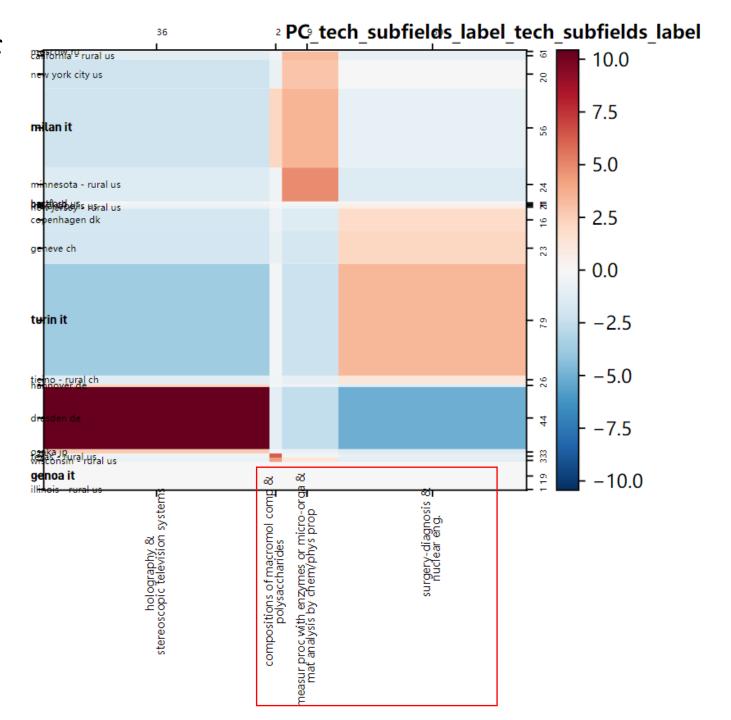
## Tech specialization of main Italian firms



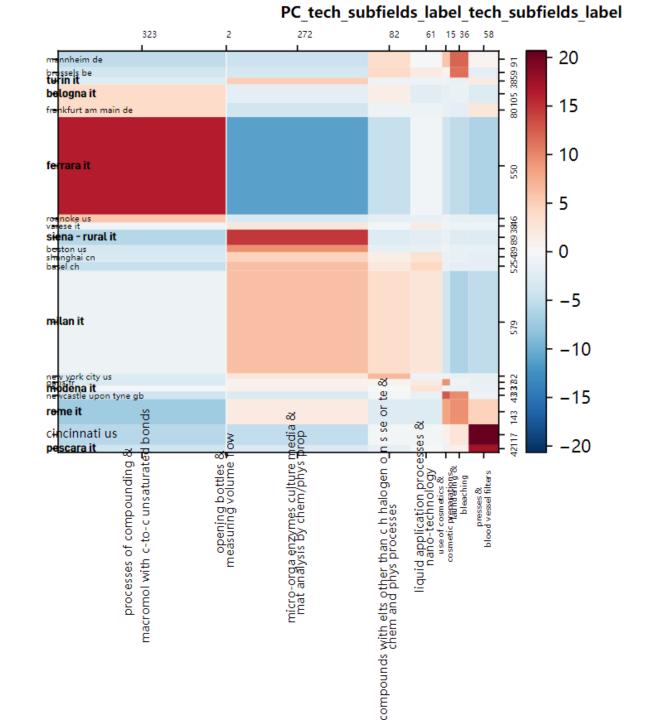
Tech specialization of main firms associated with Italian inventors



Tech specialization of location of inventors associated with the main Italian firms



# Tech specialization of location of Italian inventors



#### Conclusion

• Italian inventors have more inventing clusters than Italian firms.

• Italian inventors cooperate with international cooperators in different

inventing areas.