



”Utforskande” bibliometri - SCI-skolan

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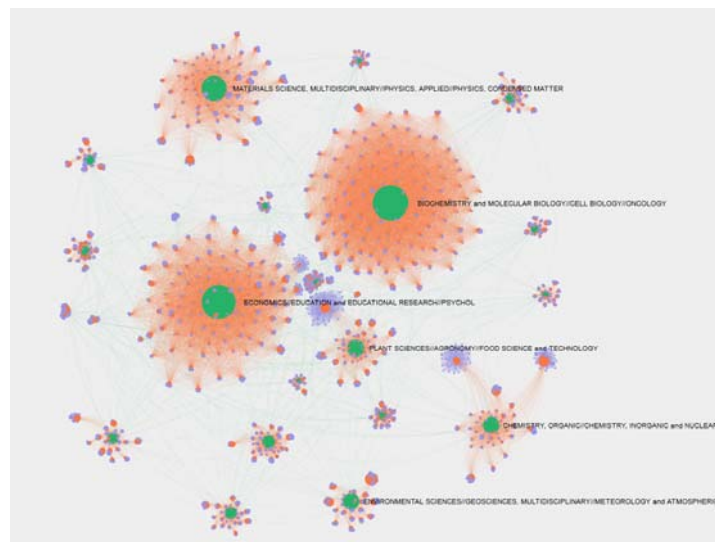
Bakgrund

- Visa upp andra delar av KTHs bibliometri, jämfört med ÅBU
 - Utvärderande vs utforskande bibliometri
- Närmare samarbete med KTH skolor
- Stöd vid ansökningar, strategiskt arbete, organisationsfrågor, rekryteringar etc (?)
- Tidigare möte med Leif och Annika ledde till detta



Klustring av all publicerad forskning

- Baserad på ca 30miljoner artiklar och deras citeringslänkar
- Hierarkisk på 4 nivåer – toppnivå på ~25 kluster och bottenivå med >37000 kluster (på ~200 – 2500 artiklar)
- Algoritmisk etikettering, samt annan info för att beskriva klusterinnehåll
- Ger en mer detaljerad och dynamisk klassificering än tex Web of Science-kategorier (som är grova, statiska, få och tidskriftsbaserade)
- Kan användas för fältnormering, identifiering av ämnen, analys av nätverk, utsökning av artiklar mm.

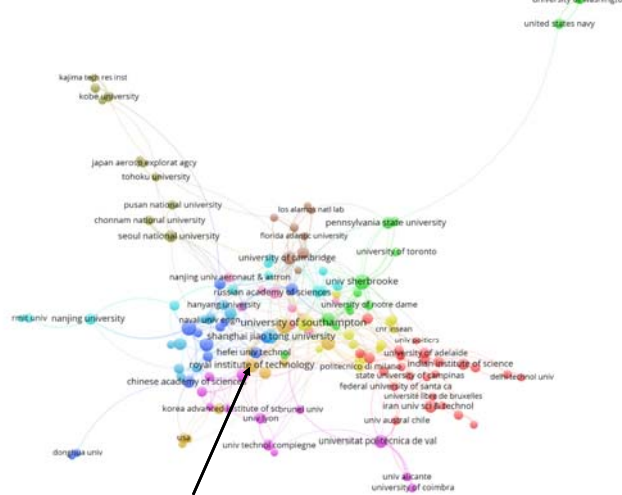


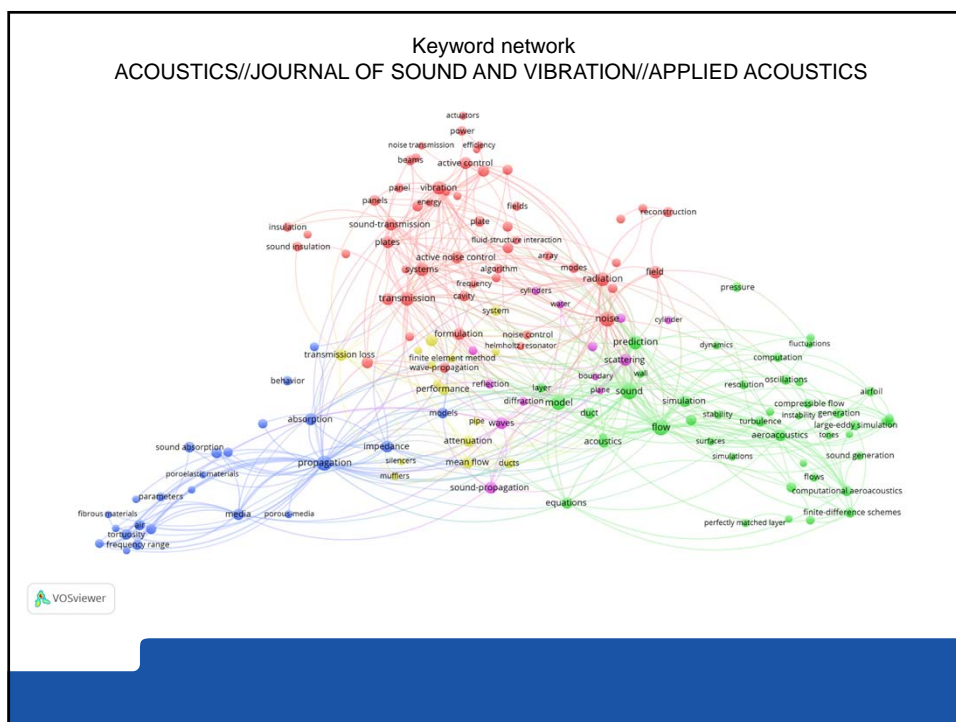
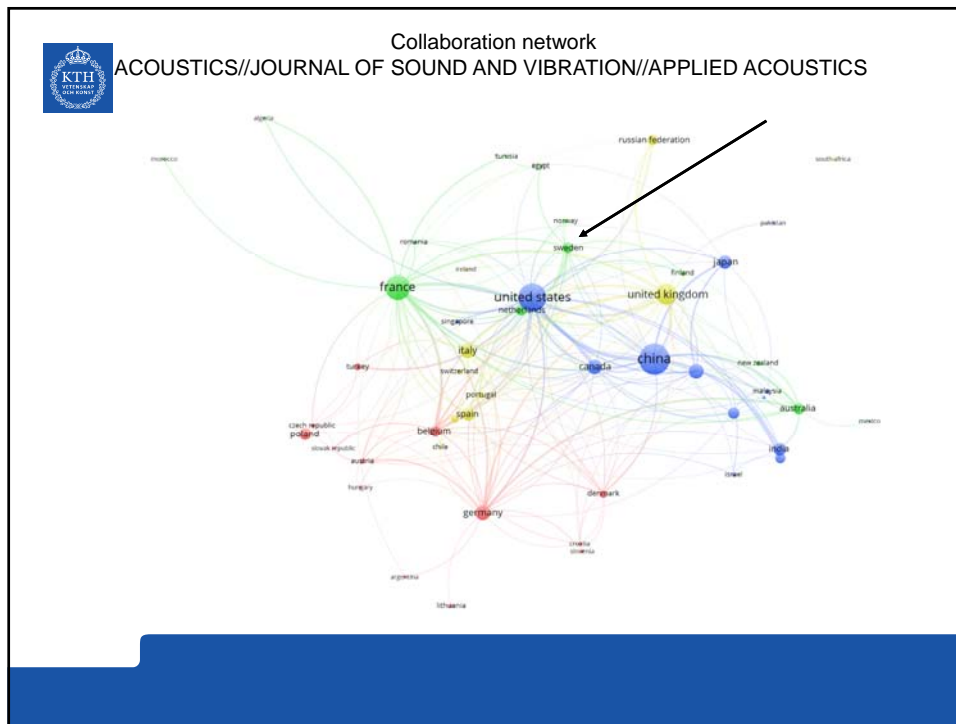


Exempel – L. Kari

PHYSICS, CONDENSED MATTER//PHYSICS, APPLIED//MATERIALS SCIENCE, MULTIDISCIPLINARY	21	nivå 4 (toppnivå)
MATERIALS SCIENCE, CERAMICS//SOLID OXIDE FUEL CELLS//JOURNAL OF THE AMERICAN CERAMIC SOCIETY	3	nivå 3
POWDER COMPACTION//FLASH SINTERING//MATERIALS SCIENCE, CERAMICS	3	nivå 2
POWDER COMPACTION//DIE FILLING//HIGH VELOCITY COMPACTION	3	nivå 1
MATERIALS SCIENCE, COMPOSITES//COMPOSITE STRUCTURES//MECHANICS	5	nivå 3
COMPOSITE STRUCTURES//FREE VIBRATION//JOURNAL OF SOUND AND VIBRATION	1	etc...
CYLINDRICAL SHELL//CONICAL SHELLS//TRUNCATED CONICAL SHELL	1	
CONSTRAINED LAYER DAMPING//ACTIVE CONSTRAINED LAYER DAMPING//VISCOELASTIC DAMPING	1	
CONSTRAINED LAYER DAMPING//ACTIVE CONSTRAINED LAYER DAMPING//VISCOELASTIC DAMPING	1	
DAMAGE DETECTION//MECHANICAL SYSTEMS AND SIGNAL PROCESSING//DAMAGE IDENTIFICATION	1	
NON CLASSICAL DAMPING//NONSTRUCTURAL SYSTEMS//NONSTRUCTURAL COMPONENTS	1	
MOVING LOAD//MOVING MASS//JOURNAL OF SOUND AND VIBRATION	2	
ROTATING BEAM//FUNCTIONALLY GRADED BEAMS//FUNCTIONALLY GRADED BEAM	2	
MECHANICS//JOURNAL OF ELASTICITY//INTERNATIONAL JOURNAL OF SOLIDS AND STRUCTURES	13	
JOURNAL OF ELASTICITY//HYPERELASTICITY//MULLINS EFFECT	13	
JOURNAL OF ELASTICITY//FINITE ELASTICITY//NON LINEAR ELASTICITY	1	
MULLINS EFFECT//STRESS SOFTENING//HYPERELASTICITY	12	
ENGINEERING, ELECTRICAL & ELECTRONIC//IEEE TRANSACTIONS ON POWER SYSTEMS//IEEE TRANSACTIONS ON POWER DELIVERY	16	nivå 4
VEHICLE SYSTEM DYNAMICS//ENGINEERING, MECHANICAL//PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART F-JOURNAL OF RAIL AND RAPID TRANSIT	16	
ACTIVE SUSPENSION//VEHICLE SYSTEM DYNAMICS//RIDE COMFORT	1	
ACTIVE SUSPENSION//VEHICLE SYSTEM DYNAMICS//ACTIVE SUSPENSION SYSTEM	1	
BASE ISOLATION//SEISMIC ISOLATION//STRUCTURAL CONTROL	2	
VIBRATION ISOLATION//ENGINE MOUNT//HYDRAULIC ENGINE MOUNT	2	
ELECTORRHOLOGICAL FLUID//ELECTORRHOLOGY//MAGNETORHOLOGICAL FLUID	13	
MAGNETORHOLOGICAL ELASTOMER//MAGNETORHOLOGICAL ELASTOMERS//MAGNETORHOLOGICAL ELASTOMER MRE	13	
MATHEMATICS//MATHEMATICS, APPLIED//MATH	7	nivå 4
MATHEMATICS, APPLIED//FRACTIONAL CALCULUS//HOMOTOPY PERTURBATION METHOD	7	
FRACTIONAL CALCULUS//FRACTIONAL DERIVATIVE//CAPUTO DERIVATIVE	7	
FRACTIONAL DERIVATIVE DAMPING//FRACTIONAL DERIVATIVE//FRACTIONAL CALCULUS	7	

Collaboration network ACOUSTICS//JOURNAL OF SOUND AND VIBRATION//APPLIED ACOUSTICS







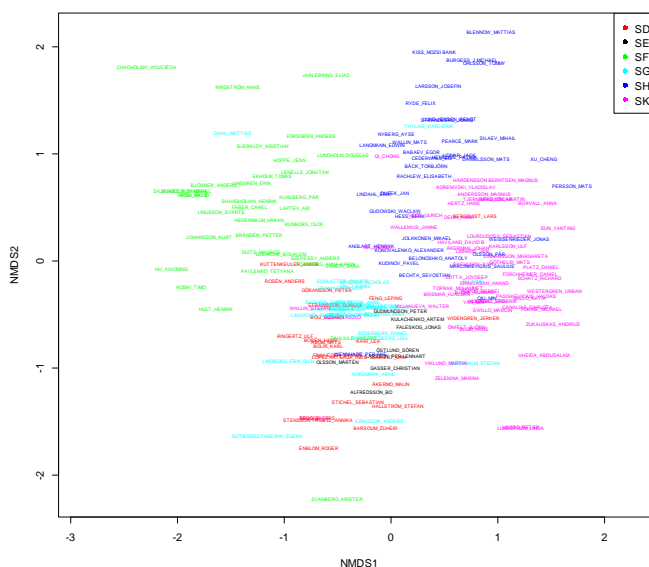
Klusterprofiler för en grupp forskare

	ACOUSTICS/JOURNAL OF SOUND AND VIBRATION/APPLIED ACOUSTICS	A POSTERIORI ERROR ESTIMATION/SUPERCONVERGENCE/ERROR ESTIMATES	ACCIDENT ANALYSIS AND PREVENTION/TRANSPORTATION/TRANSPORTATION SCIENCE & TECHNOLOGY	CAUSAL SETS/NON COMMUTATIVE GEOMETRY//ABSTRACT DIFFERENTIAL GEOMETRY	ETC...
Auth 1		2	0	4	0
Auth 2		0	1	1	0
Auth 3		0	1	0	4
Auth 4		0	0	0	1
Auth 5		1	0	3	0
ETC...					

Exempel – “seniora” forskare på SCI →



Freq-based NMDSplot





JOURNAL OF TURBOMACHINERY-TRANSACTIONS OF THE ASME//
MECHANICS// ENGINEERING, MECHANICAL

Shanghai Jiao Tong University	Shanghai	292	China	1
Indian Inst Technol	New Delhi	179	India	2
Russian Academy Of Sciences	Tomsk	158	Russian Federation	3
Tsinghua University	Hefei	126	China	4
Royal Institute Of Technology	Stockholm	124	Sweden	5
Monash University	Melbourne	118	Australia	6
Beihang Univ	Beijing	117	China	7
Peking University	Beijing	114	China	8
Imperial College London	South Kensington	105	United Kingdom	9
Nanyang Technological University	Singapore	105	Singapore	10
University Of Cambridge	Cambridge	103	United Kingdom	11
Xi'an Jiaotong University	Xian	100	China	12
Ohio State University	Columbus	95	United States	13
University Of Melbourne	Victoria	93	Australia	14
Stanford University	Stanford	92	United States	15



ACOUSTICS//ACTIVE NOISE CONTROL//
JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA

Shanghai Jiao Tong University	Shanghai	121	China	1
Katholieke Universiteit Leuven	Louvain	78	Belgium	2
Xi'an Jiaotong University	Xian	72	China	3
University Of Southampton	Southampton	66	United Kingdom	4
Hong Kong Polytechnic University	Kowloon Kln	65	China	5
Univ Sherbrooke	Sherbrooke	64	Canada	6
Ecole Cent Lyon	Ecully	63	France	7
Univ Maine	Le Mans	57	France	8
Harbin Engn Univ	Harbin	56	China	9
Iran Univ Sci & Technol	Tehran	52	Iran	10
Agh University Of Science And Technology	Krakow	51	Poland	11
Royal Institute Of Technology	Stockholm	51	Sweden	12
Nanjing University	Nanjing	43	China	13
Chinese Academy Of Sciences	Shenyang	42	China	14
Seoul National University	Seoul	38	Korea	15



Användning

- Beslutsunderlag
- Rekrytering
- Ansökningar & samarbetspartners
- Vore roligt om denna typ av analyser kunde användas ute på skolorna/institutionerna.
- Ökat fokus på "research intelligence"

Tankar / feedback?
Vad låter mest intressant?



Tack för uppmärksamheten!

