

2021

Catalog of Undergraduate Education

**School of Mathematical Sciences
Peking University**

.....	1
.....	1
.....	2
.....	3
.....	4
.....	4
.....	4
.....	4
.....	5
.....	5
.....	10
.....	12
.....	13
.....	13
.....	13
.....	13
.....	13
.....	14
.....	20
.....	22
.....	23
.....	23
.....	23
.....	23
.....	23
.....	24
.....	30
.....	32
.....	33
.....	33
.....	33
.....	33
.....	33
.....	34
.....	39
.....	40
.....	41
.....	47

1904
1913
1919

1912

1985

1995

3+X

2019

20

2020

23

Melbourne-Peking Virtual Research Hub for Mathematics and Statistics

	/	26821
		4169
		13300

					3	2021
04031661		3	3		3	2021
04031740		3	3		3	2021
04031731		3	3		3	2021
04031751		2	2		4	2021 3
61130030		1				2021 3
61130040		1				

					B
--	--	--	--	--	---

04831420

B 3 3 0

00132304		4	5		
00132341		5	6		
00135450		3	3		
00132320		3	3		
00132340		3	3		
00131300		3	3		
00130200/ 00131670		3	3		

00130161		3	3		
00132310		3	3		
00132370		3	3		

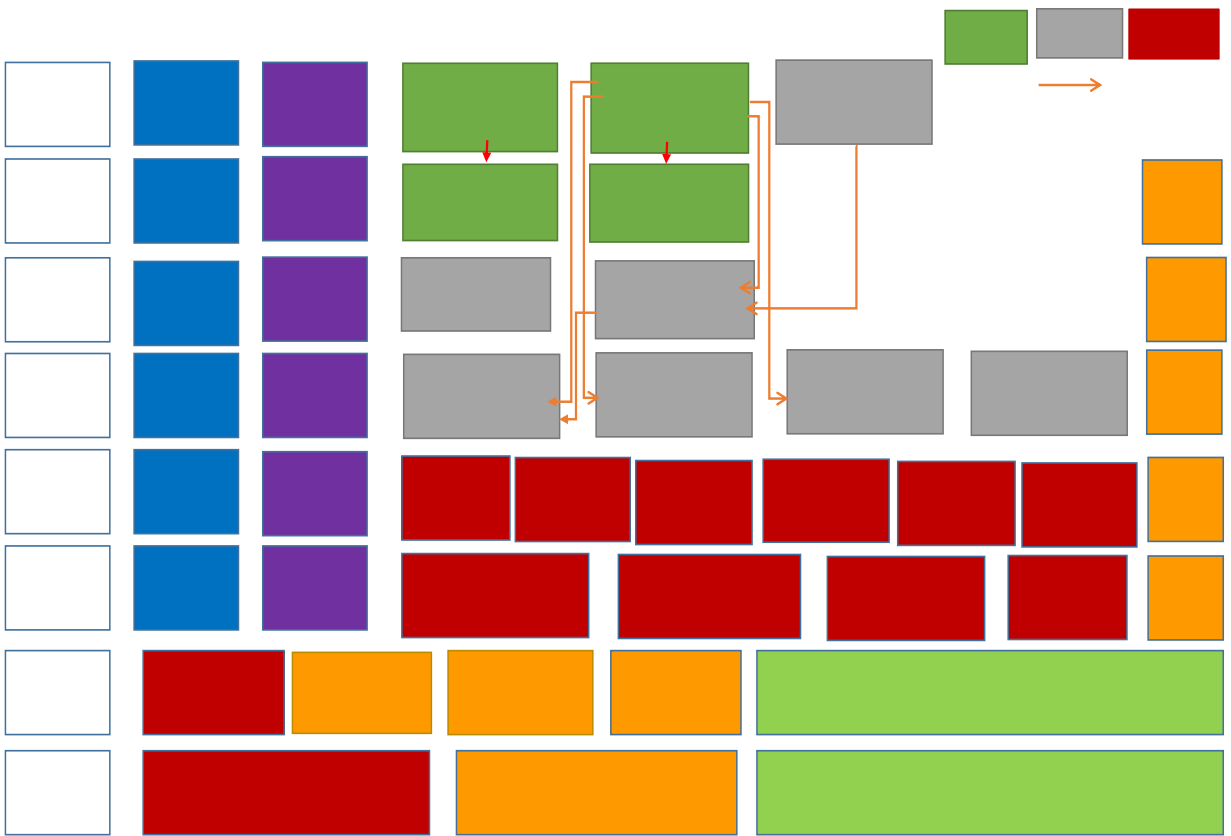
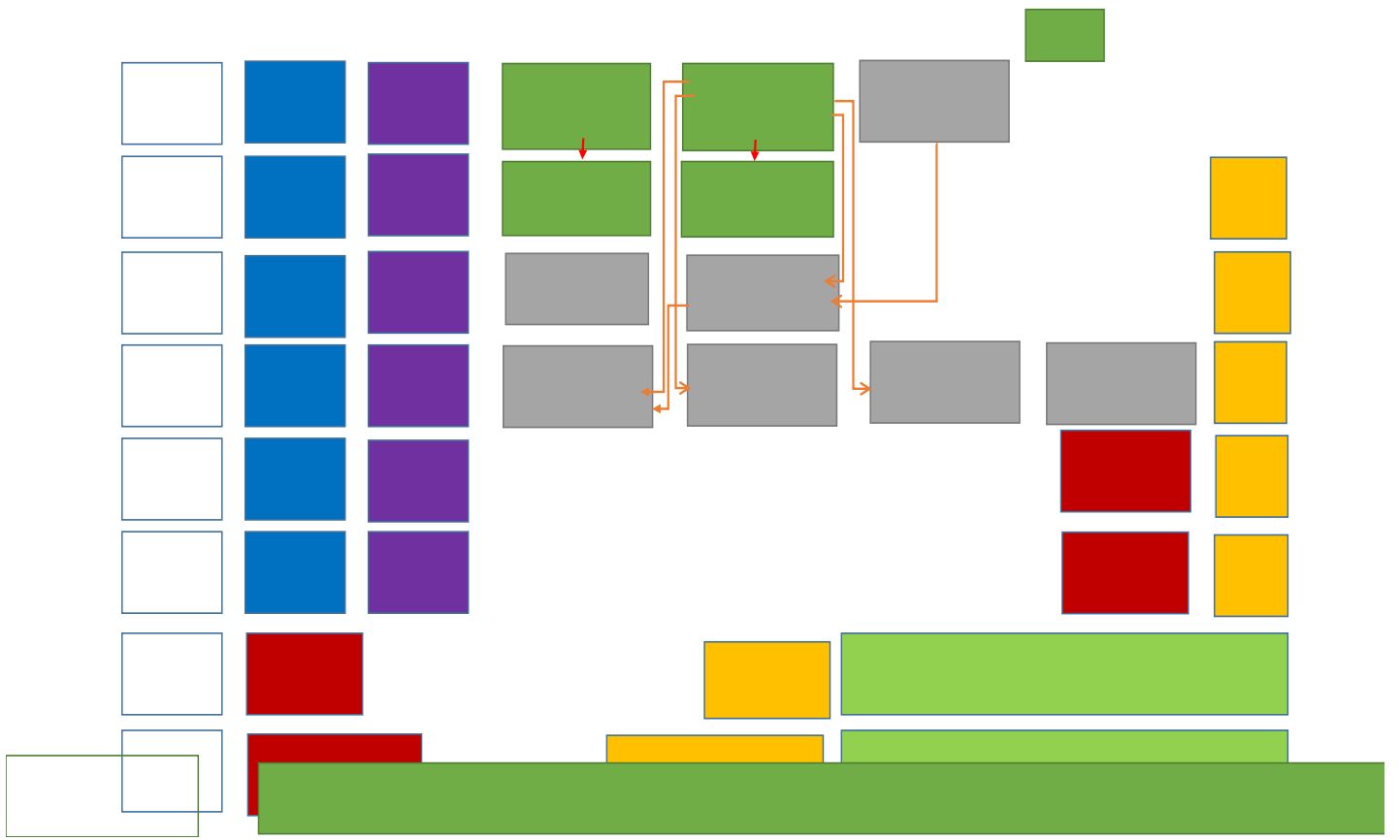
00132830		3	3		
00135460		3	3		
00133090		3	3		

00132370		3	3		
00134330		3	3		
00136760		3	3		
00135810		3	3		
00131280		3	3		
00136730		3	3		
00131100		3	3		
00132350		3	3		
00133010		3	3		
00137110		3	3		

2

3-1

3-2-1



1940

1956

1972

1985

1991

1995

1997

2010 7

--	--

04031740		3	3		2021 3
04031731		3	3		2021 3
04031751		2	2		4 2021 3
61130030		1			2021 3
61130040		1			2021 3
					2021 5
04831410	B	3	3	0	B
04831650	B	0	2	32	B

04831420	B	3	3	0	
04830494		0	2	32	
60730020		2	2	0	
		1*4	2	0	

00132301		5	6		
00132302		5	6		
00132321		5	6		
00132323		4	5		

00132304		4	5		
00132341		5	6		
00135450		3	3		
00132320		3	3		
00132340		3	3		
00131300		3	3		
00130200/ 00131670		3	3		

00135460		3	3		
00136750		3	3		

00135460		3	3		

00133090		3	3		
----------	--	---	---	--	--

--	--	--	--	--	--

00135460

00133030/ 00102516	/	3	3		
00110710		3	3		
00133020		3	3		

00132370		3	3		
00133010		3	3		
00133090		3	3		
00133050		3	3		
00135220		3	3		
00102892		3	3		
00100877		3	3		
00133030/ 00102516	/	3	3		
00133070/ 00131100					
00132100		3	3		
00136180		3	3		

8

I II

4

A B C

1

1

2

a)

0

I(5)

II(5)

III(4)

I(5)

II(4)

(5)

(3)

(3)

3

(3)

b)

3

(3) (3) (3) (3) (3)
(3) (3) / (3) (3)
(3)
a) b) c)

1:

2:

3

ABCD

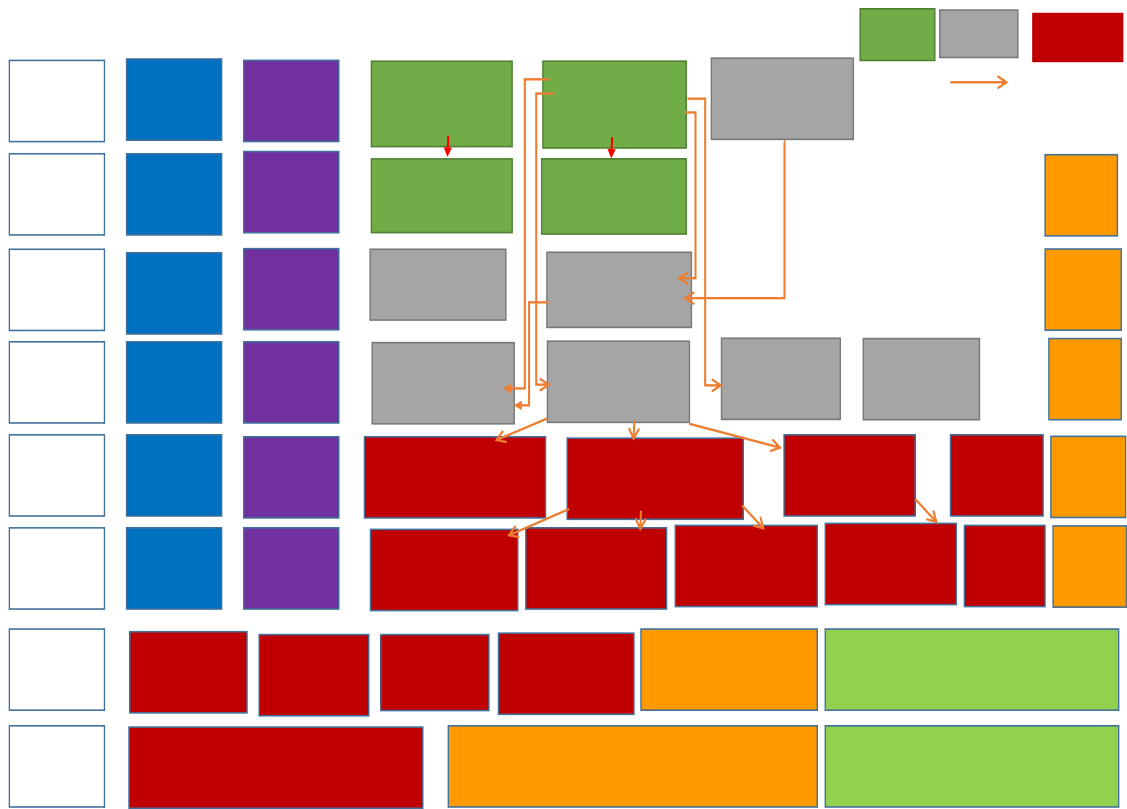
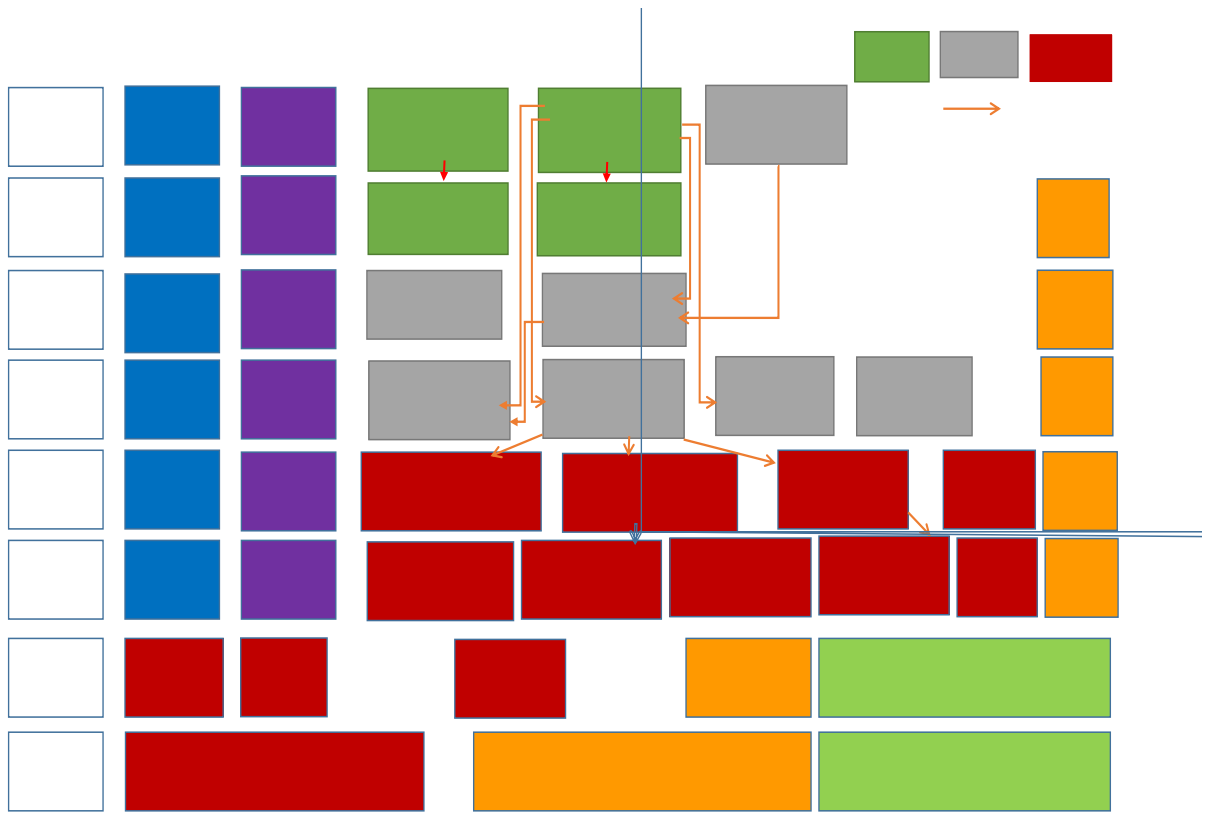
4

P/F

2

3-1

3-2-1



		2-8			2021 6
04031761		2	2		2021 3
04031651		3	3		2021 3
04031661		3	3		2021 3

04031740		3	3		3	2021
04031731		3	3		3	2021
04031751		2	2		4	2021 3
61130030		1				2021 3
61130040		1				2021 3
					5	2021
04831410	B	3	3	0		B
04831650	B	0	2	32		B
04831420	B	3	3	0		

04830494		0	2	32	
60730020		2	2	0	
		1*4	2	0	

00132301		5	6		
00132302		5	6		
00132321		5	6		
00132323		4	5		

00132304		4	5		

00132341		5	6		
00135450		3	3		
00132320		3	3		
00132340		3	3		
00131300		3	3		
001302000/ 0131670/00 137170		3	3		

00100873		3	3		
00112780		3	3		
00136720		3	3		
00130640		3	3		

00100883

3

3

00135460		3	3		
04630790		3	3		
00133010		3	3		
00137130		3	3		
00110780		3	3		
00136660		3	3		
00112630		3	3		
00132310		3	3		
00130161		3	3		
00110130		3	3		
00112530		3	3		
00112650		3	3		
00112710		3	3		
00110070		3	3		
00102442		3	3		

8

I II

4

A B C

1

1

2

(a)

0

I(5)	II(5)	III(4)	
I(5)	II(4)	(5)	(3)
(3)	3	(3)	3

(b)

10 5 5 0

i.

3

(3) (3) (3)

ii.

7

(3) (3) (3) (3) (3)

(3) (3)

3

(a) i.

,

ii.

= *50%+ *50%

(b)

,

1:

2:

3

4

P/F

1

2

0 a b

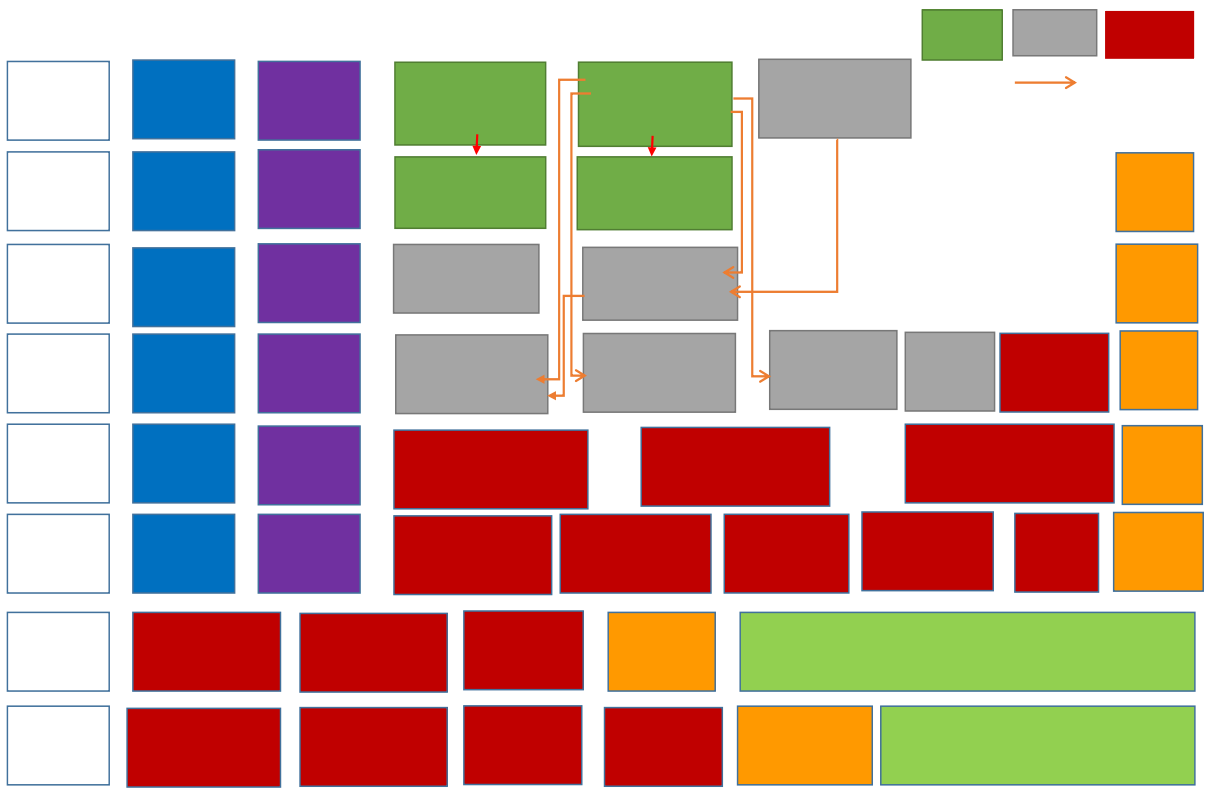
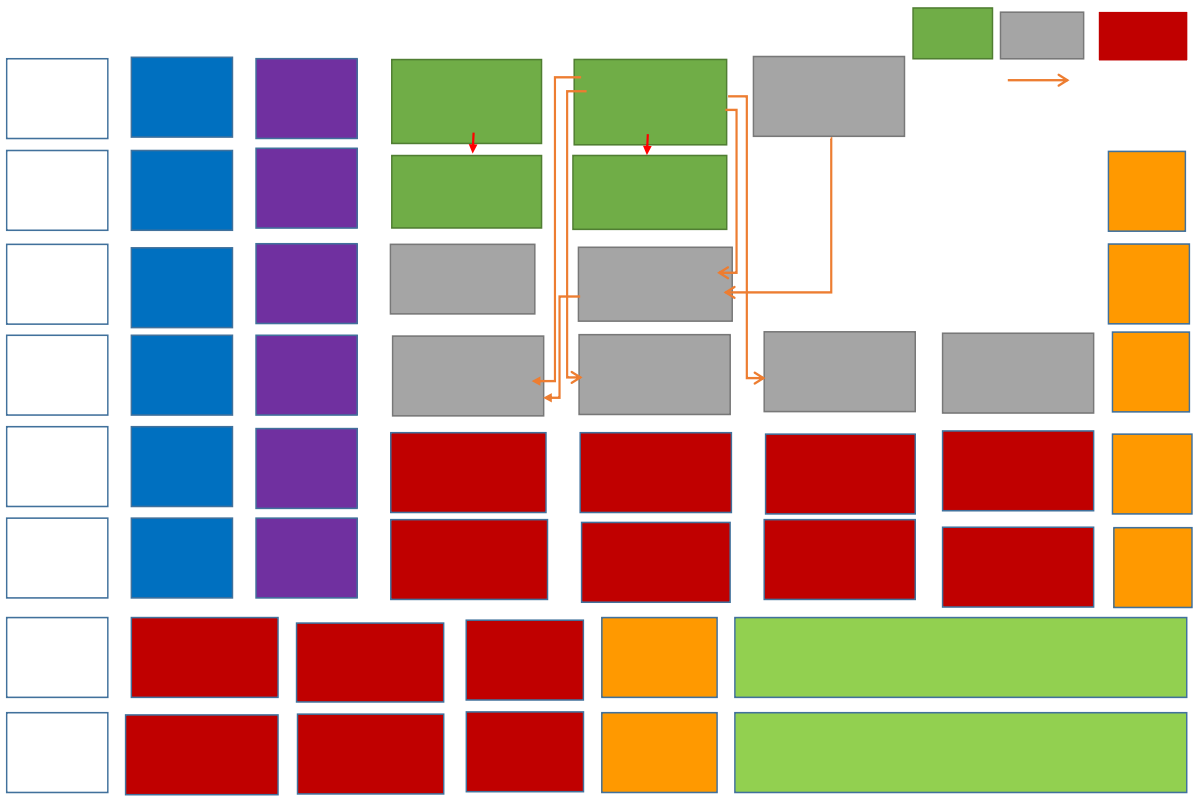
a

13

I 5	II 5	III 4	I 5	II 4
5	3	3	3	3
/	3	B/A 3	B/A 3	/

b

- i. $\frac{2}{3}$ $\frac{3}{3}$
- ii. $\frac{4}{4}$
- c 40% 60%
- d
- e = 0-5



		2-8			2021 6
04031761		2	2		2021 3
04031651		3	3		2021 3
04031661		3	3		2021 3
04031740		3	3		

					3	2021
04031731		3	3			2021 3
04031751		2	2		4	2021 3
61130030		1				2021 3
61130040		1				2021 3
					5	2021
04831410	B	3	3	0		B
04831650	B	0	2	32		B
04831420	B	3	3	0		

04830494		0	2	32	
60730020		2	2	0	
		1*4	2	0	

00132320		3	3		
00132340		3	3		
00131300		3	3		
00137170		3	3		

00130280		3	3		
00137150		3	3		

00132370		3	3		
00132310		3	3		
00130161		3	3		
00135460		3	3		
00132330		3	3		
00133010		3	3		
00136660		3	3		

00110950		3	3		
00136720		3	3		
00133050		3	3		
00133070/ 00131100		3	3		
00133110		3	3		
00130730		3	3		
00110060		3	3		
00135290		3	3		
00135040		3	3		
04831750		3	4		
04830220		3	3		
00137960		3	3		

04831780		2	2		
04833040		5	4		
00102892		3	3		
00102893		3	3		
00135590/04831300	/	3	3		
00130830		3	3		
00130210/ 04830230		3	3		
04831290/ 00110960	/	3	3		
04834210		4	5		
04830270		2	2		
04831890		2	2		
04831280		2	2		

8

I II

4

A B C

1

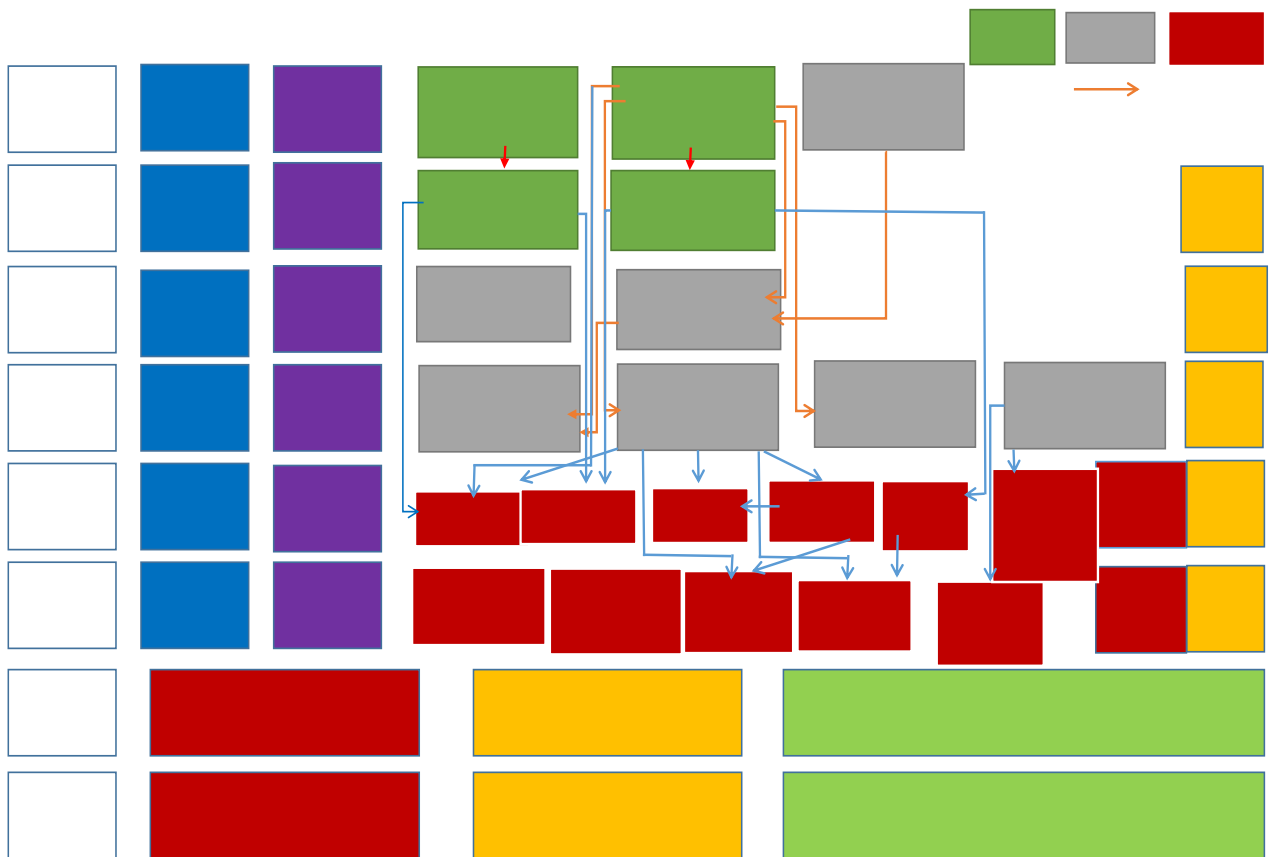
i.

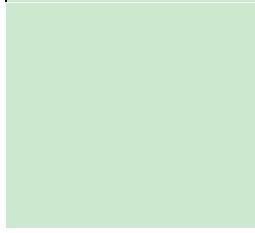
ii.

2

3-1

3-2-1





\mathbf{R}^n
 \mathbf{R}^m

*

1
2
3
4
5
6
7
8
9

16

- 1
- 2 PAC
- 3
- 4 Bias-complexity Trade-off
- 5 Rademacher Complexity and VC-dimension
- 6 Non-uniform Learnability
- 7 Algorithmic Complexity

- 1
- 2
- 3
- 3
- 4
- 5 Kernel Methods
- 6 Boosting
- 7 SVM
- 8
- 9 Jackknife Bootstrap

- 1
- 2
- 3
- 4
- 5 Multiclass
- 6 Ranking

10%+

40%+

50%

1
2
3
4
5

50% 20% Project:30%

00113690



00130210

04834220

00137150

