



# Introduction to Sailing

## part 2

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YCC, <http://cern.ch/yachting>

# After first outings...

- *“Where does the wind come from?”*
- *“How to slow down/break?”*



# Outline

True and apparent wind

Trimming sails

Spinnaker

More on manoeuvres:

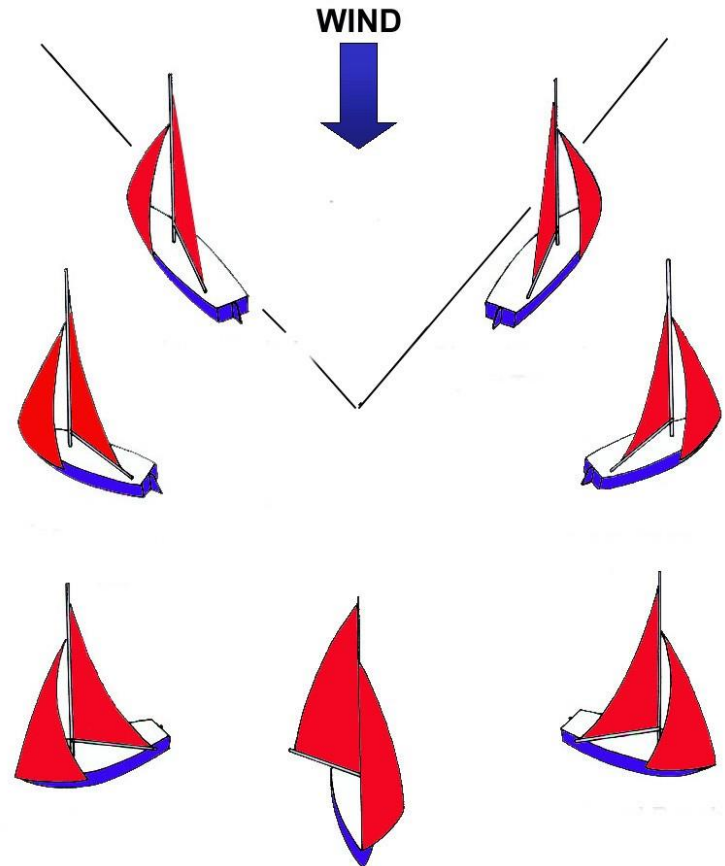
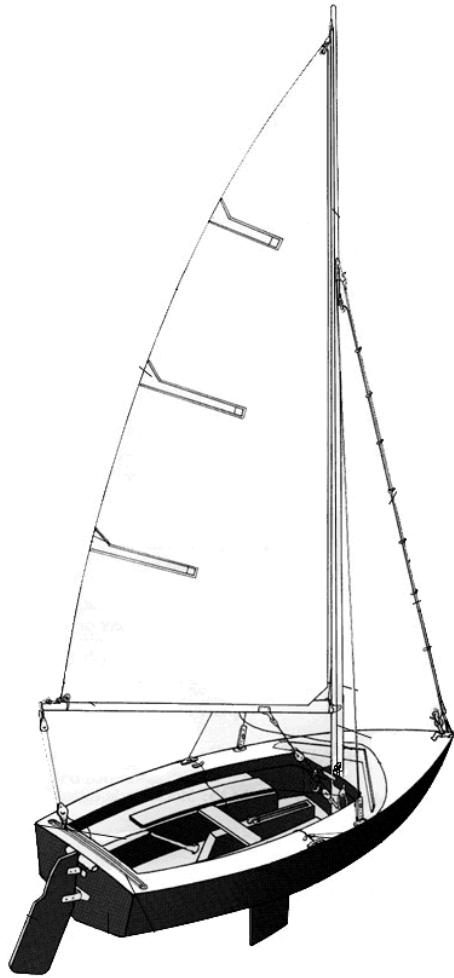
- tacking, gybing
- MOB (man overboard)
- leaving and entering port

Priority rules

**please interrupt  
and ask questions!!!**



# Do you still remember...?

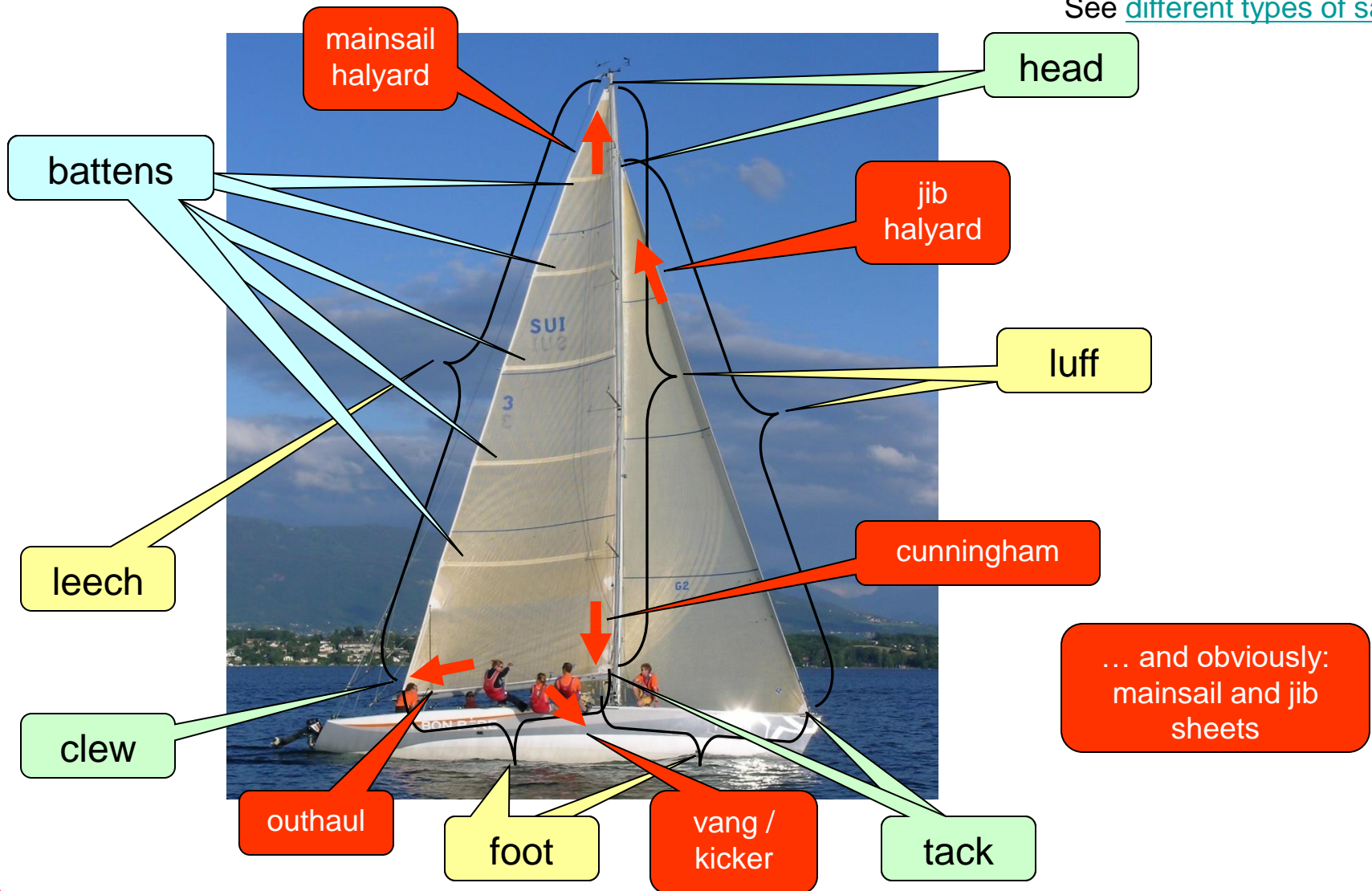


Courtesy of [www.easytolearn.net](http://www.easytolearn.net)



# A sail

See [different types of sails](#)



Pictures © Sebastian Łopieński

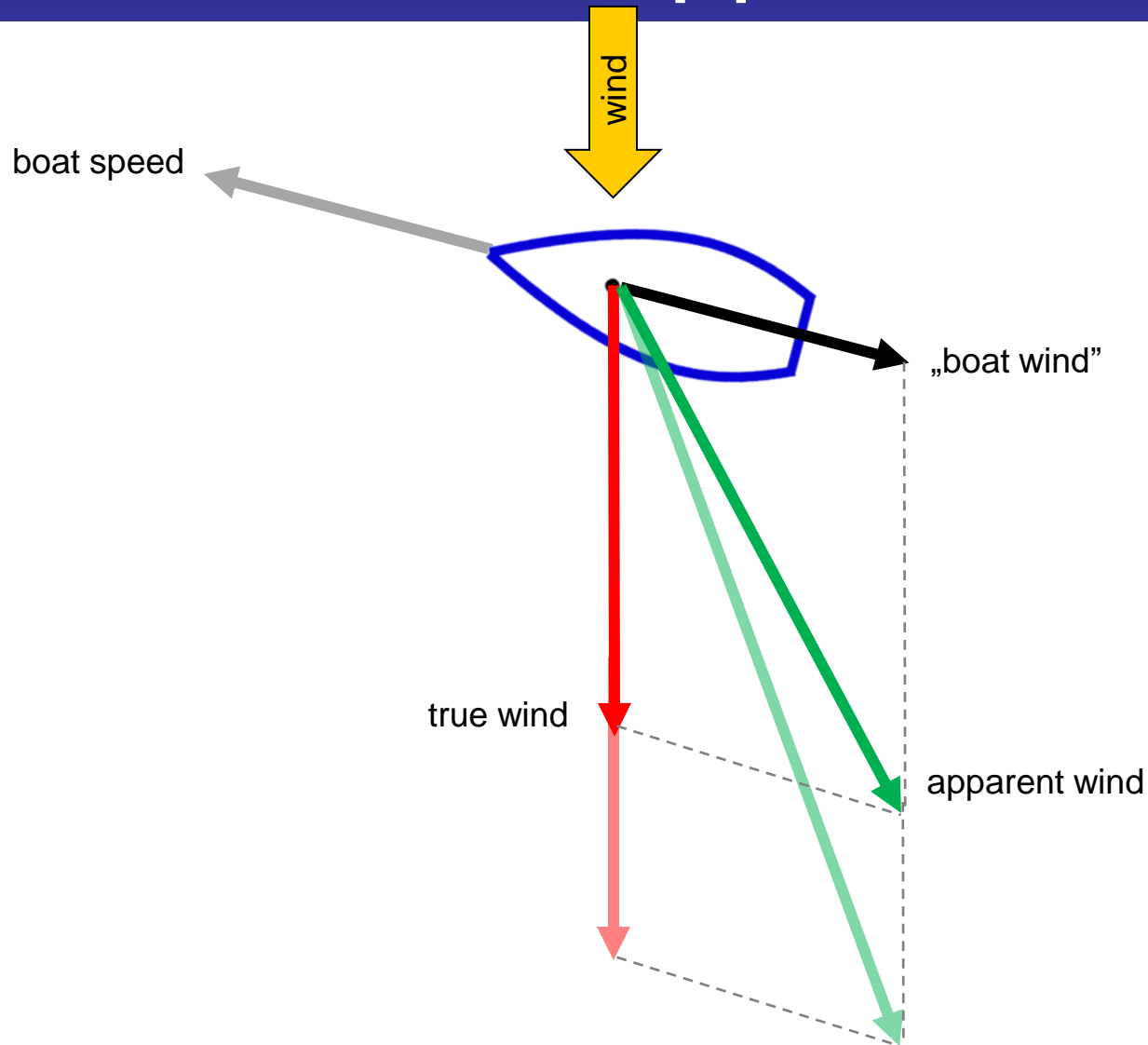


# Some verbs...

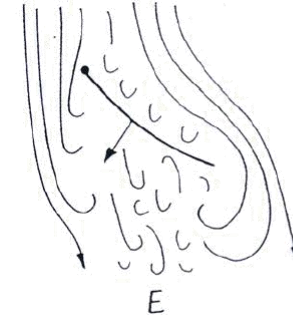
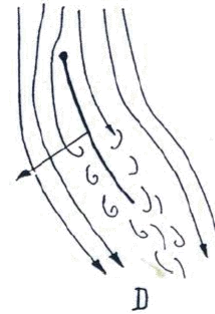
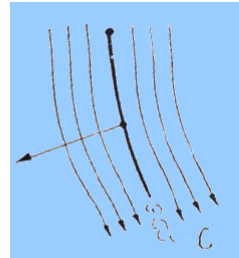
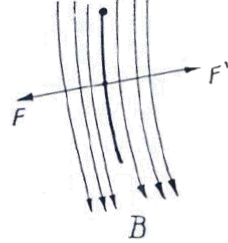
- **to hoist** a sail (fr. *hisser*)  
and **to lower** it (fr. *affaler*)
- **to trim** a sail (fr. *border*)  
and **to ease** it (fr. *choquer*)
- **to luff** (fr. *lofer*)  
and **to bear away** (fr. *abattre*)
- **to tack** (fr. *virer*)  
and **to gybe** (fr. *empanner*)



# True and apparent wind



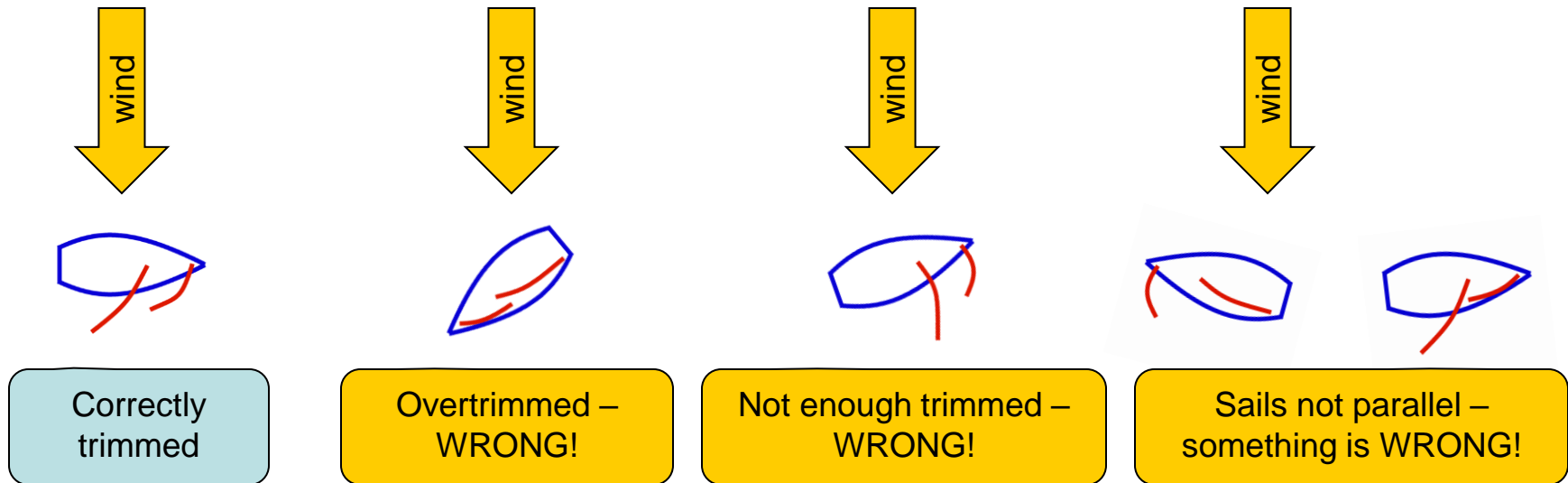
# Trimming a sail



- Sail eased completely flatters and generates no force (A)
- Sail pulled slightly doesn't flutter, but still no force (B)
- When trimmed some more, sail starts to work (C) **OPTIMUM**
- More trimming generates air turbulence and lowers the force (D)
- Hard trimming against the wind is highly inefficient (E)

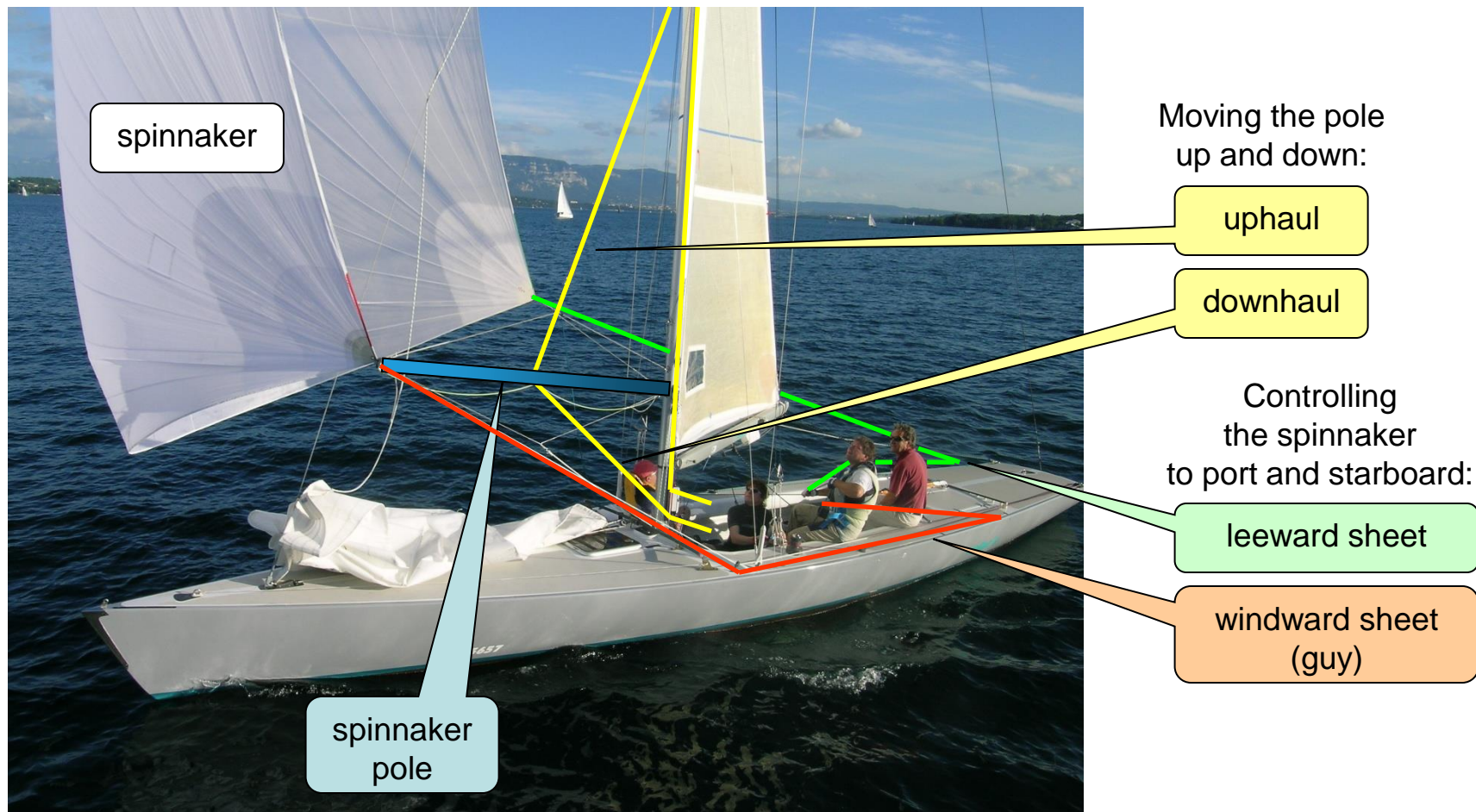


# Trimming sails



- A sail should be let out until it stops working, ...and then trimmed a little to make it stop flatter
- Correct sail trim depends on the course, so: Changing your course? → work on your sails!
- Both sails (mainsail and the jib) should be (more or less) parallel

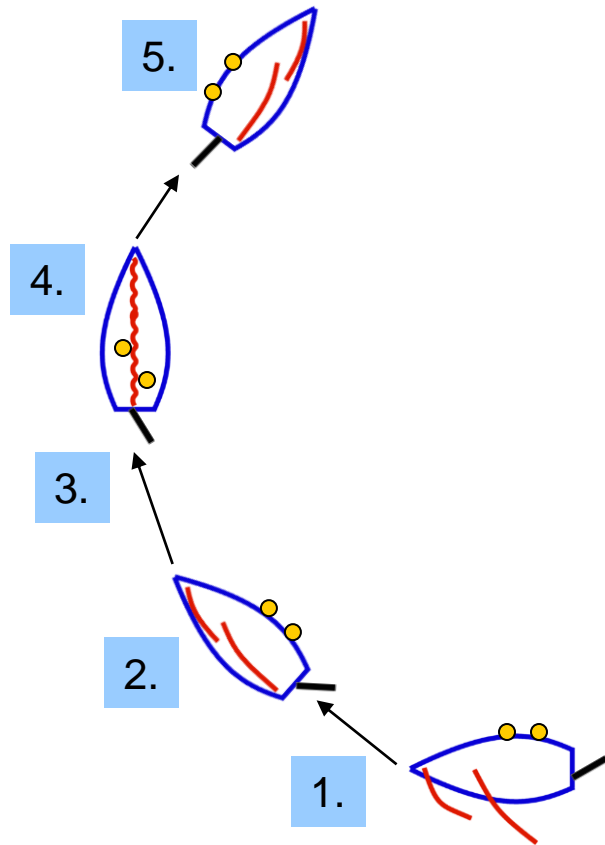
# Spinnaker (symmetric)



Pictures © Sebastian Łopieński



# Tacking



## helmsman:

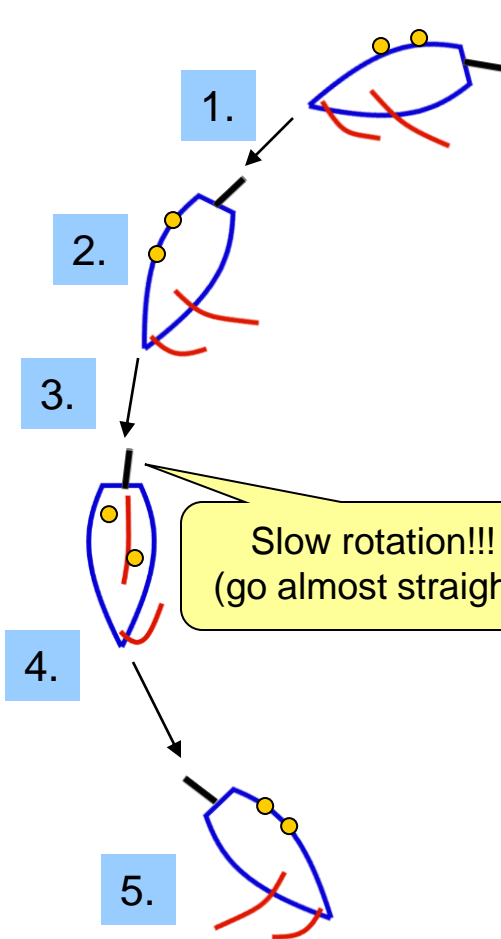
1. trimming mainsail  
luffing up  
to close-hauled course
2. “ready to tack?”
3. “*tacking!*” / “*lee-oh!*”  
luffing up more  
(rudder to starboard \*)
4. changing place when  
passing line of the wind
5. rudder zero

## crew:

1. trimming jib
2. grabbing other jib sheet  
“*ready!*”
3. easing jib completely  
when it stops working
4. changing place when  
passing line of the wind
5. trimming jib on the new side



# Gybing



## helmsman:

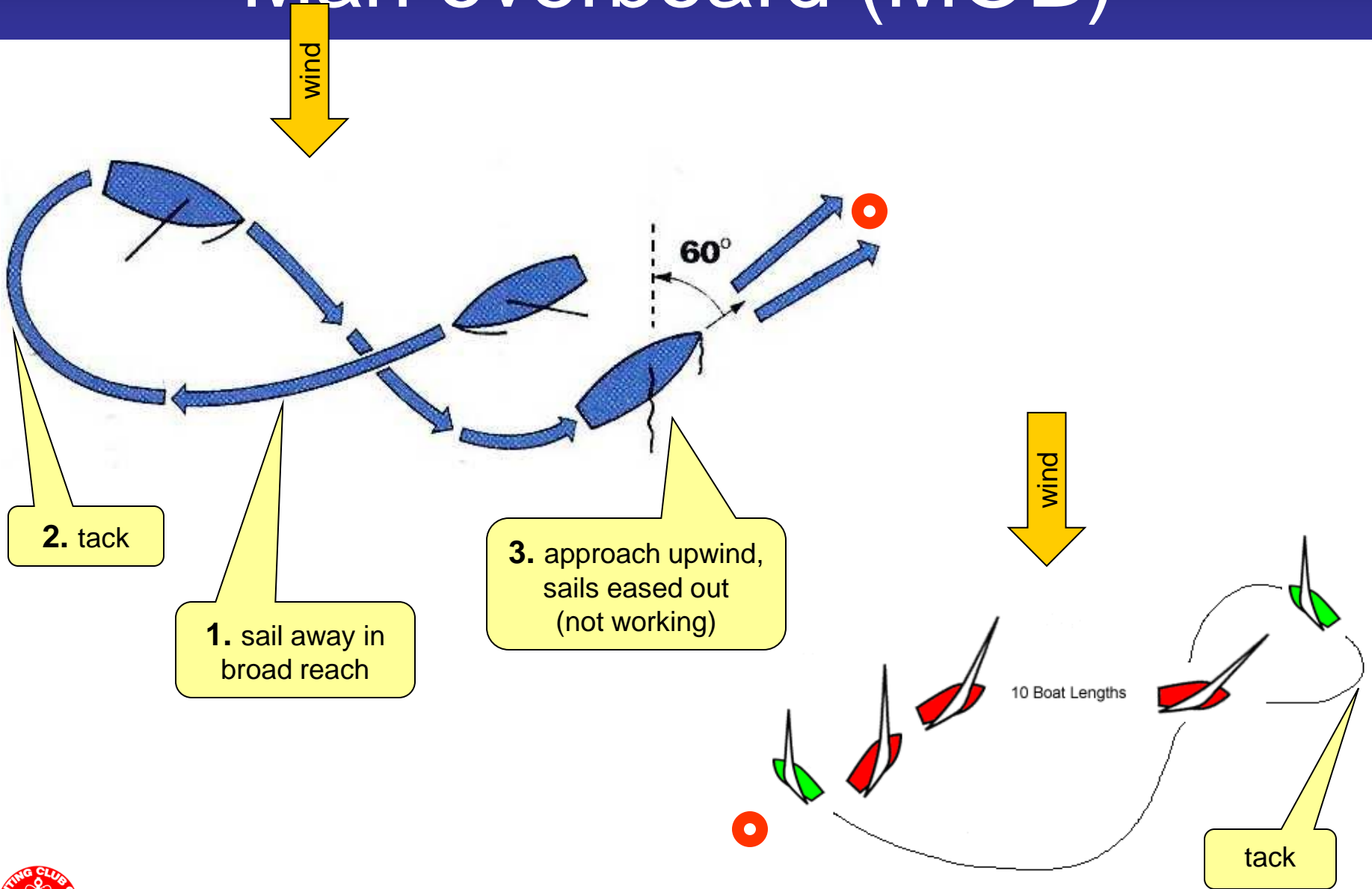
1. easing mainsail falling off to broad-reach course
2. “ready to gybe?”
3. “gybing!” falling off (very slowly!) bringing mainsail to the middle “watch your head” / “heads down”
4. changing place when passing line of the wind easing mainsail to the other side
5. rudder zero

## crew:

1. easing jib
2. grabbing other jib sheet “ready!”
3. continue easing jib
4. changing place when passing line of the wind pulling jib to the new side
5. trimming jib (loosely!)



# Man overboard (MOB)

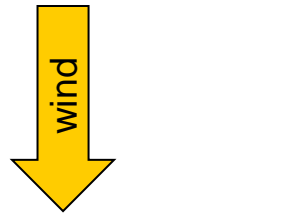


From <http://www.lalzas.com/products.asp?S0=1&S1=4>

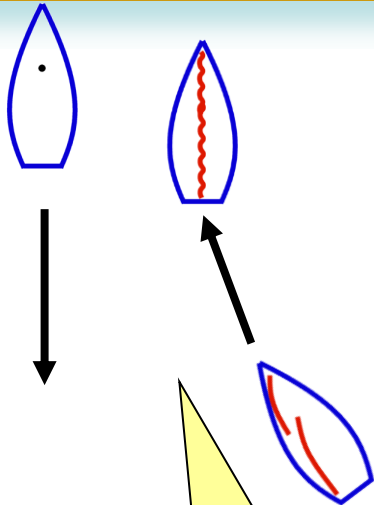
From <http://www.learn2sail.co.uk/dinghies/section.asp?id=11>



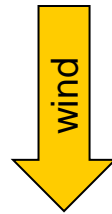
# Leaving and entering a harbour



Land

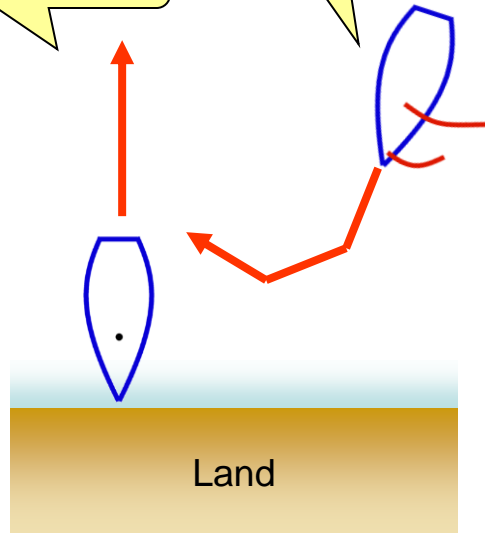


both manoeuvres  
easy

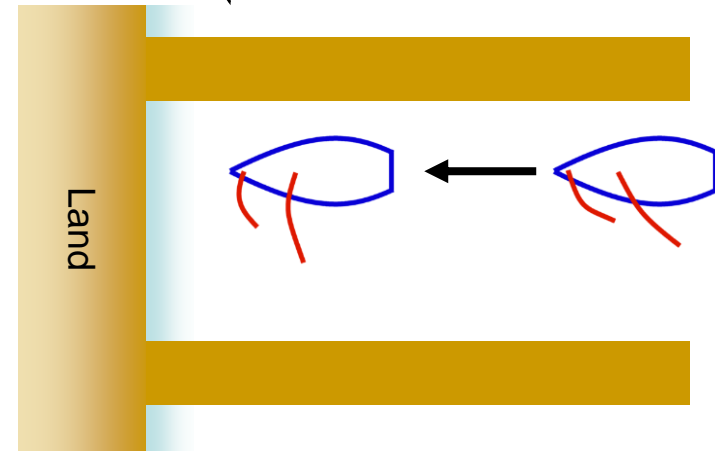
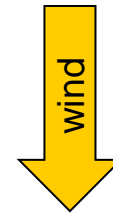


dangerous!

difficult



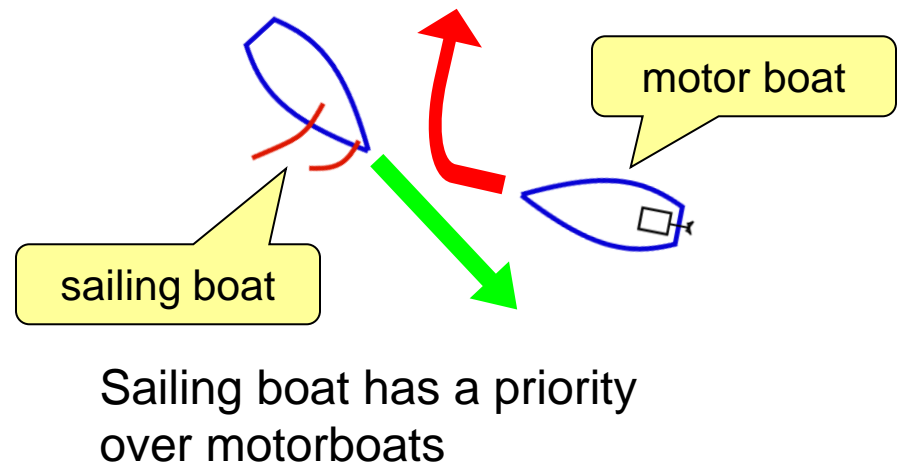
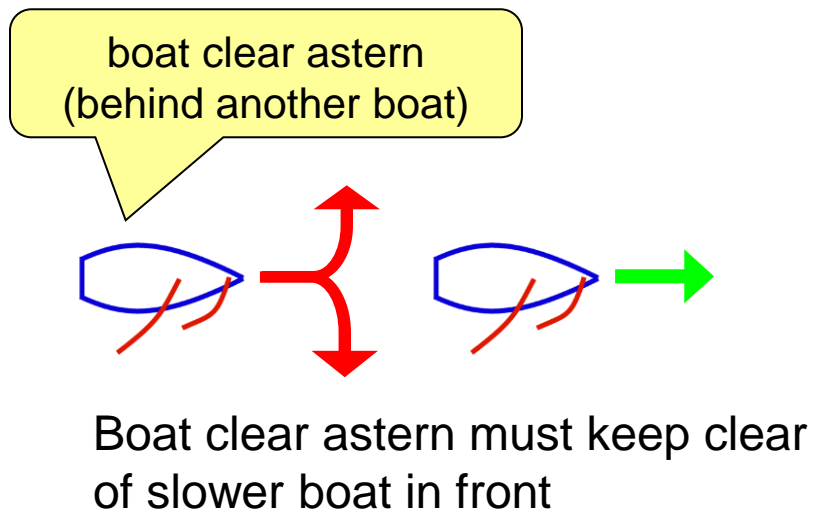
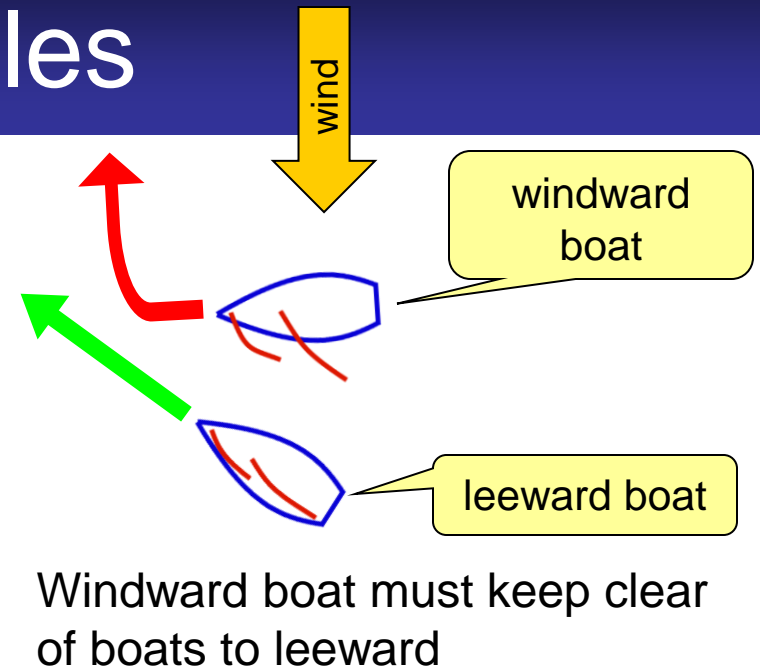
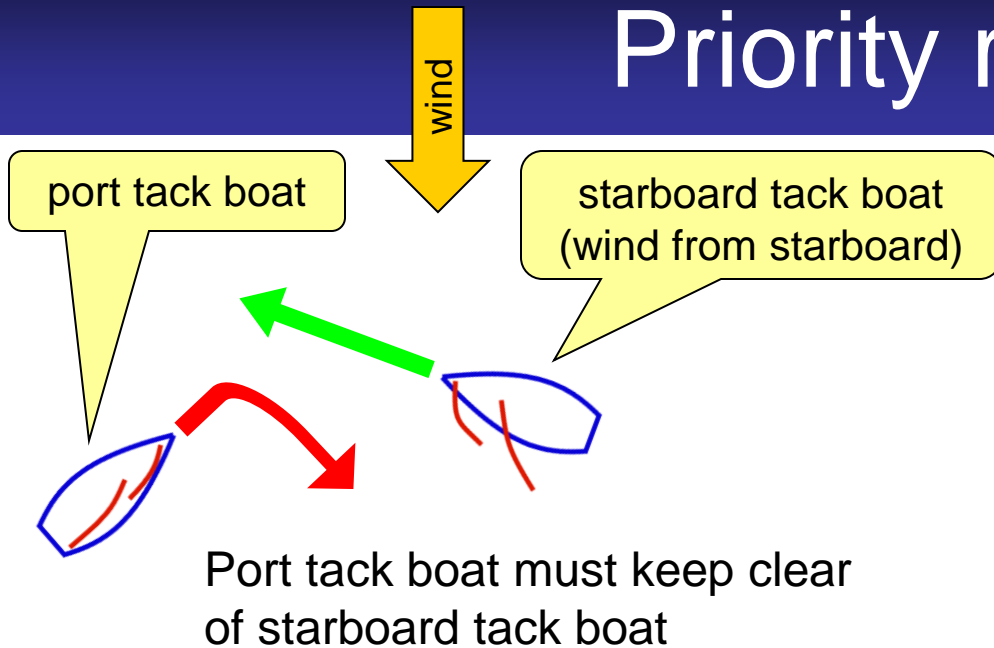
typical in  
Port Choiseul



keep to windward  
ready to ease or put down sails  
(when entering harbour)



# Priority rules



**There are exceptions!!!**

# Distance, speed etc.

- **1 nautical mile** (nm) is **1852** meters  
(length of 1 minute of arc on the equator)
- **1 knot** (kn) is 1 nautical mile per hour  
(2 knots = 1 m/s)
- (YCC) boats - usually 3 to 5 knots,  
up to 7-10 knots (could be more for  
planing dinghies)





# Wind – Beaufort scale

0	0-1 knots	0-1 km/h	flat water
1	1-3 knots	2-5 km/h	ripple
2	4-6 knots	6-11 km/h	wavelets
3	7-10 knots	12-19 km/h	large wavelets
4	11-16 knots	19-28 km/h	small waves, white horses
5	17-21 knots	29-38 km/h	long moderate waves, many white horses
6	22-27 knots	39-49 km/h	large breaking waves, white foam
7	28-33 knots	50-61 km/h	
8	34-40 knots	62-74 km/h	
9	41-47 knots	75-87 km/h	
10	48-55 knots	88-102 km/h	
11	56-63 knots	103-117 km/h	
12	64+ knots	118+ km/h	the air is filled with foam and spray

Hopefully you won't be sailing in these winds on Lac Lemman!



# Further reading

“*YCC Sailing Course for Beginners*” booklet:  
<http://cern.ch/yachting/courses/YCCSailingCourse.pdf>



# Take part in YCC activities

- Attend other [Theory courses](#)
- Come and sail on [Thursday practice evenings](#)
  - meet people, sail on different boats
- Participate in [Internal regatta](#)
  - best way to learn sailing, even for complete beginners
- Register to [Surveillance boat shifts](#)
  - you'll have to do two shifts before taking a sailing test
- Check the [Calendar](#) for other events
  - *Newcomers Welcome, Opening Dinner, etc.*



# The famous Lake Geneva races

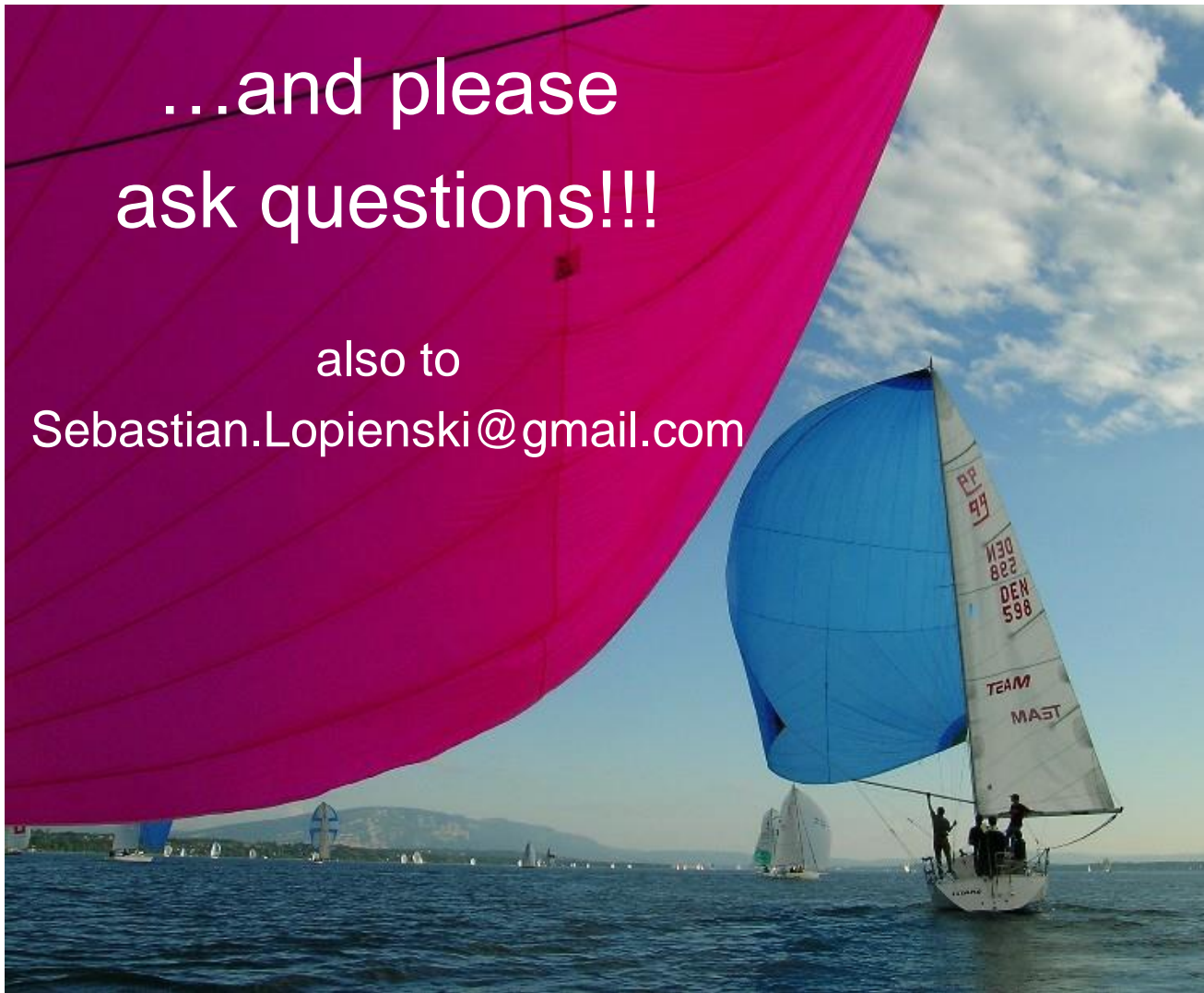
- Geneve-Rolle regatta *Saturday, early June*  
(200+ boats passing by Versoix around 15-16h)
- Bol d'Or regatta *Saturday, mid-June*  
(600+ boats passing by Versoix around 11h-13h)



# Thank you

...and please  
ask questions!!!

also to  
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Pictures © Sebastian Łopiński

