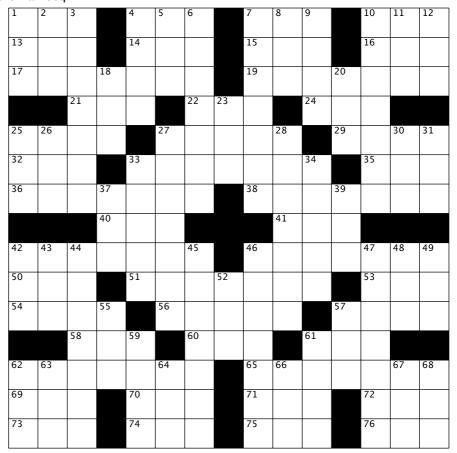# Compactness!  Created by Jean Goubault-Larrecq

## ACROSS

1. Some cotton
4. Supremum (Sec. 2.3.2)
7. Minimal upper bounds (Ex. 9.6.16)
10. Piece of clothing designed by G. Plotkin, maybe (Fig. 9.4)
13. I
14. Go wrong
15. Timetable abbr.
16. Lyric poem
17. Coauthor of Weierstrass who proved compact=sequentially compact in metric spaces (Prop. 3.3.7; name not mentioned in the book, sorry)
19. Easier to understand
21. Greek goddess of dawn
22. Speed meas.
24. Beta's objective; alpha's as well (Sec. 7.6.1)
25. Insane in spain
27. Coauthor of Lebesgue who prove compact=closed +bounded in R^n (Prop. 3.3.4)
29. Enthralled
32. Annoy
33. Coauthor of Tong who proved an insertion theorem (Ex. 6.3.21)
35. Zip-A-Doo-___
36. Building
38. Saving
40. Moose relative
41. Time since birth
42. Mel Brooks' "Blazing ___"
46. Not quite 62-across... a mess, actually
50. Born Cassius Clay
51. T-shirt opening
53. Anger
54. Stinging critter
56. Sordid
57. Requirement
58. Oxygen, e.g.
60. Stinging critter
61. Brother or sister
62. Every net has such a point in a compact set (Prop. 4.7.22)
65. Hail
69. Help!
70. Had a bite
71. Processor
72. "The Company"
73. Small child
74. Tavern
75. A bit
76. Brooks of country music's Brooks and Dunn

## DOWN

1. World-wide?
2. Back
3. ___-Greco-Lechicki Theorem: every T3 Cech-complete space is consonant (Ex. 8.3.4)
4. Oceans
5. Ash container
6. Raise
7. Amazonian knife
8. Www address
9. Make beer or coffee
10. Air vortex
11. Chemistry ending
12. Always, to the poet
18. Menagerie
20. Oxygen and nitrogen, for the most part
23. Prefix with compact (Thm. 3.4.8)
25. Make stuff up
26. Category of posets (Sec. 4.12.1)
27. Supporters
28. Adverb with compact (Sec. 4.8)
30. Grier of "Jackie Brown"
31. Your, religiously
33. "To ___ Mockingbird", Harper Lee novel
34. Fashion
37. FBI agent
39. Contains a subnet that converges, in compact sets (Corl. 4.7.27)
42. Carpenter's tool
43. In the style of
44. Revulsion
45. Dirty campaigner
46. Definitely topical in this puzzle
47. Curtain holder
48. Before, to the poet
49. ___ Cross
52. Owns
55. Not, in Paris
57. Not any
59. Pierce
61. Gulf War missile
62. Chicago hrs.
63. Toilet, to Brits
64. One of the equations defining exponentials (Sec. 5.5.1)
66. Tax pro
67. Three in Rimini
68. Attained sup (Sec. 2.3.2)