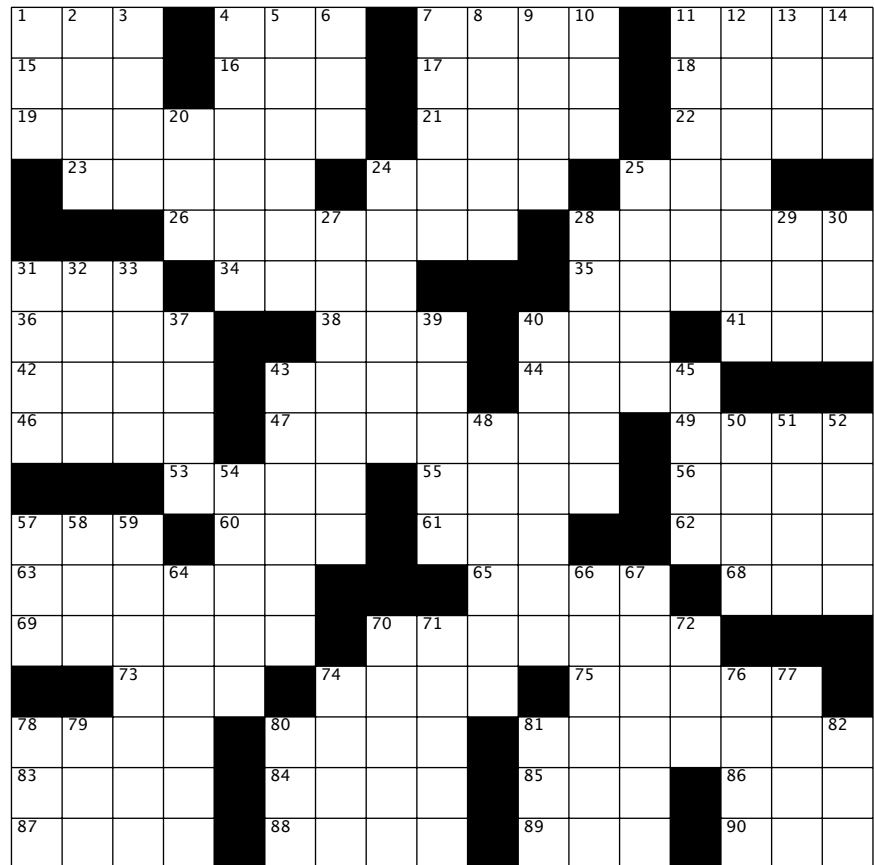# At least, a topology crossword puzzle that obeys the rules   Created by Jean Goubault-Larrecq

ACROSS

1. British thermal unit, slightly more than one kilojoule
4. ___-wan Kenobi
7. Small island
11. Has a left-adjoint tensor (Sec. 6.6.3)
15. Pigsty
16. Killed by curiosity?
17. Relentlessly gloomy
18. Sir Thomas
19. Virgins
21. Writer Bombeck
22. Preposition used with retractions (e.g., Prop. 5.1.69)
23. Commemorative stone slab
24. American association of retired persons
25. London feature
26. ___ closed=regular (Ex. 4.1.21)
28. Measures how far apart two points can be (Chap. 3)
31. Cell stuff
34. Not us
35. Not us either
36. Haystack
38. Mass of eggs
40. ___compact, criterion for compactness in presence of completeness (Thm. 3.4.8)
41. Rent
42. Against
43. Essence
44. Author of a selection lemma (Ex. 4.5.15)
46. Generates a topology (Def. 4.1.6)
47. Convergence in this topology is continuous convergence (Prop. 5.4.21)
49. Flat bread
53. Small bottle
55. Repeatedly asks for payment
56. Black
57. Headed
60. Married woman, for short
61. And so on and so forth
62. After eight
63. Periodical
65. Open, e.g. (see discussion on Scott topology, Sec. 4.2.2)
68. Use a needle
69. Religious body
70. Condition of being overweight
73. ___ Maria
74. Open-topped pastry
75. Wagnerian river
78. Prefix with 28-across, makes it asymmetric
80. Eye part
81. Composed of three parts
83. ___ continuity, generalizes equicontinuity (Lem. 5.4.36)
84. Jacob's son
85. Denver to Chicago dir.
86. Unique number
87. ___wolf
88. Dregs
89. Dubuque to Chicago dir.
90. Category of sets

DOWN

1. Pace
2. Hot drinks
3. Eta of adjunctions (Sec. 5.5.2)
4. Wild cat
5. Author of fixed point theorem (Thm. 3.4.5)
6. Possessive form of it
7. Downward closed and directed (Def. 5.1.45)
8. "Oops!"
9. Sugar cube
10. Never ratified US amendment: civil rights may not be denied on basis of sex
11. Suave
12. Dog of mixed descent
13. Old TV tube
14. Head of firm
20. Eastern st.
24. ___ open: part of definition of embedding (Prop. 4.10.9)
25. Gave a lavish party
27. Antennae
28. Ethics
29. Anger
30. Chicago hours
31. Drearily dull
32. Columbus ship
33. Deeds
37. Capital of Ukraine
39. Short musical composition
40. Walks like a show horse
43. Knotted and twisted, as a tree
45. Basic object of topology (Def. 4.1.1.)
48. Coauthor of fixed point theorem, with 5-down? (Sec. 7.4.4)
50. Wading bird
51. Accessible (Def. 4.1.16)
52. Afresh
54. ___ of a compact subset by continuous map is compact (Prop. 4.4.13)
57. Continuous from X to R with the Scott topology (Ex. 4.3.11)
58. Slippery fish
59. Visionary
64. University of California campus
66. Mermaids
67. 51-down and regular (Def. 4.1.19)
70. Popeye's girl
71. A poset has one iff continuous (Def. 5.1.22)
72. Yang's mate
74. O(X) is the ___ locale over X (Thm. 8.1.26)
76. Inner chamber in a Greek temple
77. Inventor of c-spaces (Sec. 5.1.2)
78. Chop, as wood
79. First lady?
80. Sick
81. T-shirt, for short
82. Still