

Javaple Exercises Output, Andrew Banman

>> **ex1_torus**

intervals =

Dimension: 0

[0.0, infinity): [0]

Dimension: 1

[0.0, infinity): [0,6] + [3,6] + [0,3]

[0.0, infinity): [1,2] + [0,2] + [0,1]

Dimension: 2

[0.0, infinity): [1,3,4] + [0,1,3] + [1,7,8] + [0,3,5] + [5,7,8] + [3,6,8] + [0,2,5] + [2,6,8] +
[3,5,8] + [1,2,8] + [1,2,4] + [0,2,6] + [4,5,7] + [2,4,5] + [0,6,7] + [4,6,7] + [3,4,6] + [0,1,7]

>> **ex2_kleinbottle**

intervals =

Dimension: 0

[0.0, infinity): [0]

Dimension: 1

[0.0, infinity): [1,2] + 2[0,2] + [0,1]

>> **ex3_RP2**

intervals =

Dimension: 0

[0.0, infinity): [0]

>> **ex7_sizeVR**

Max filtration time, size of VR, computation time

For d_max = 3, we have the following:

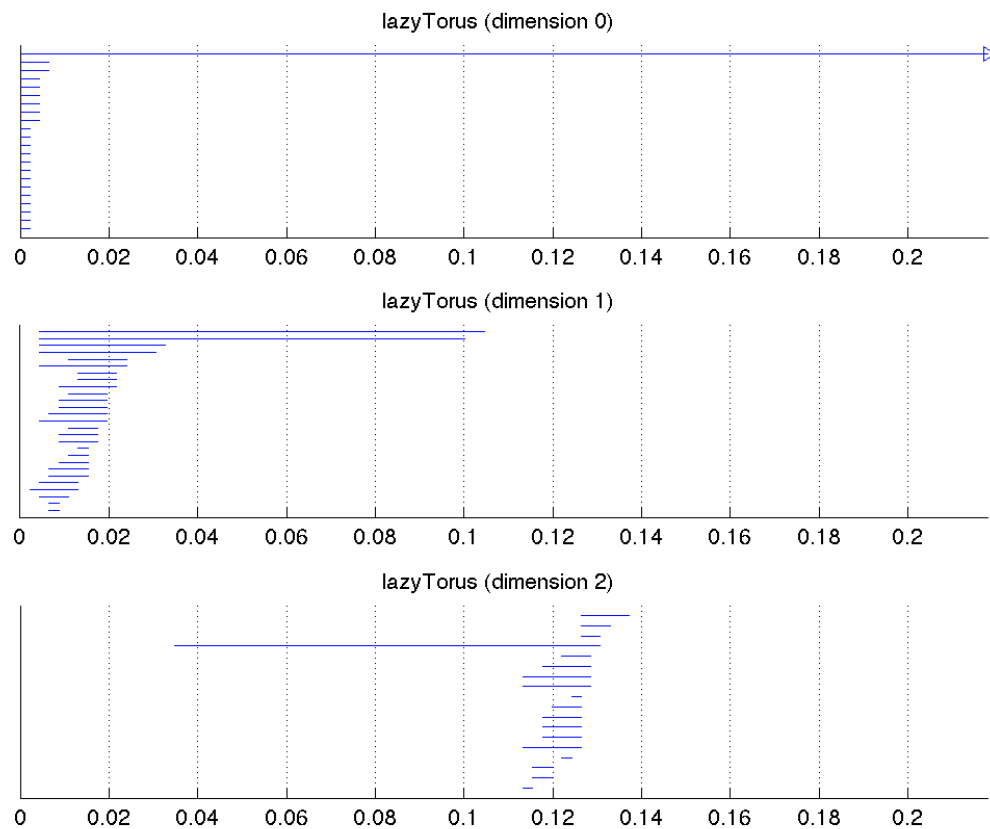
900.0000e-003	82.4790e+003	489.7838e-003
920.0000e-003	94.5630e+003	159.6916e-003
960.0000e-003	123.9250e+003	443.3811e-003
1.0200e+000	183.3070e+003	302.2826e-003
1.1000e+000	302.8190e+003	828.0120e-003

For d_max = 4, we have the following:

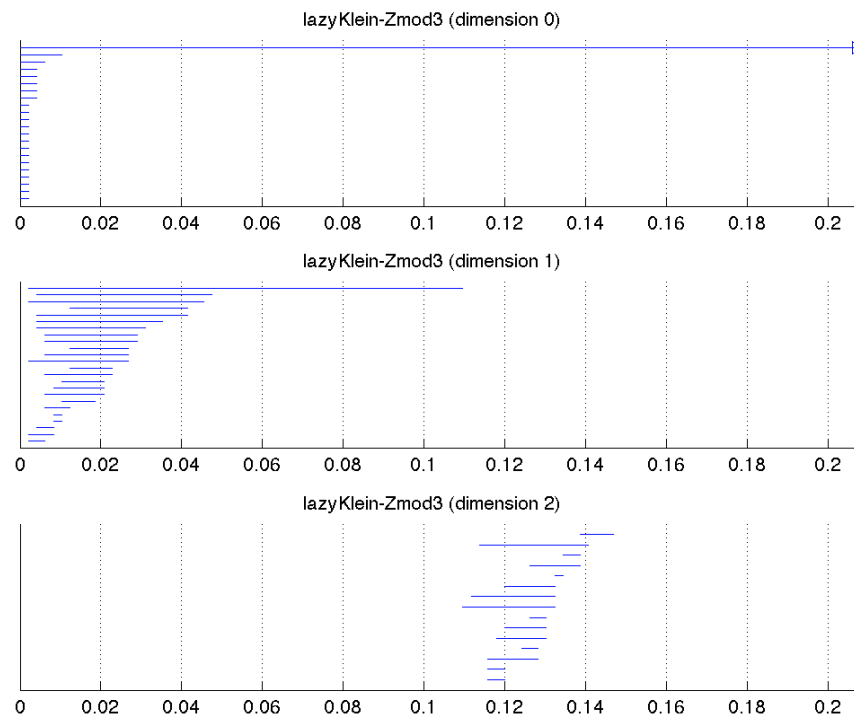
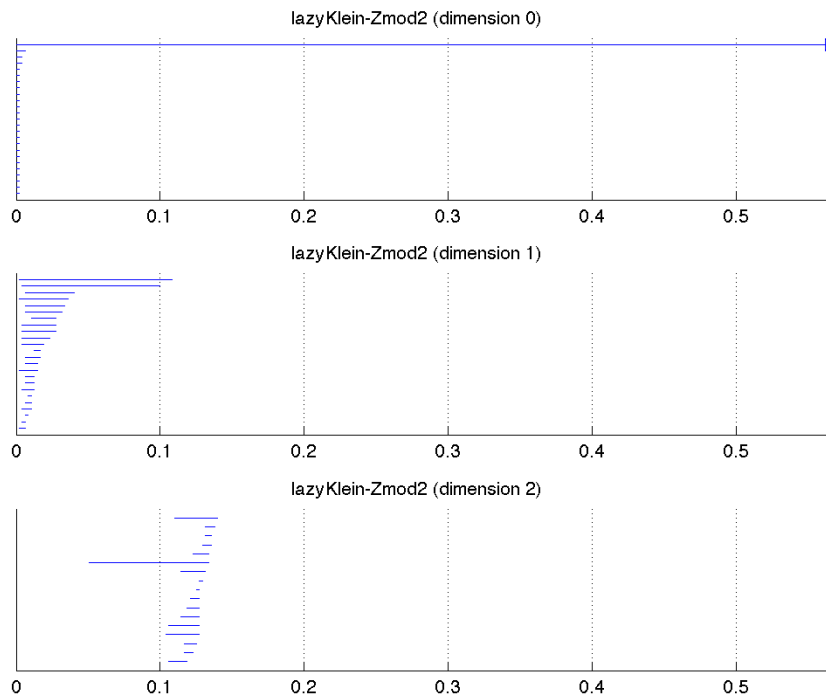
900.0000e-003	159.1560e+003	250.4750e-003
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```
>> ex8_9
non_zero_Betti2 =
  1
  0
  1
non_zero_Betti7 =
  1
  0
  0
  0
  0
  0
  1
```

```
>> ex16_lazyTorus
```



```
>> ex16_lazyKleinBottle
```



>> ex16_lazyRP2

