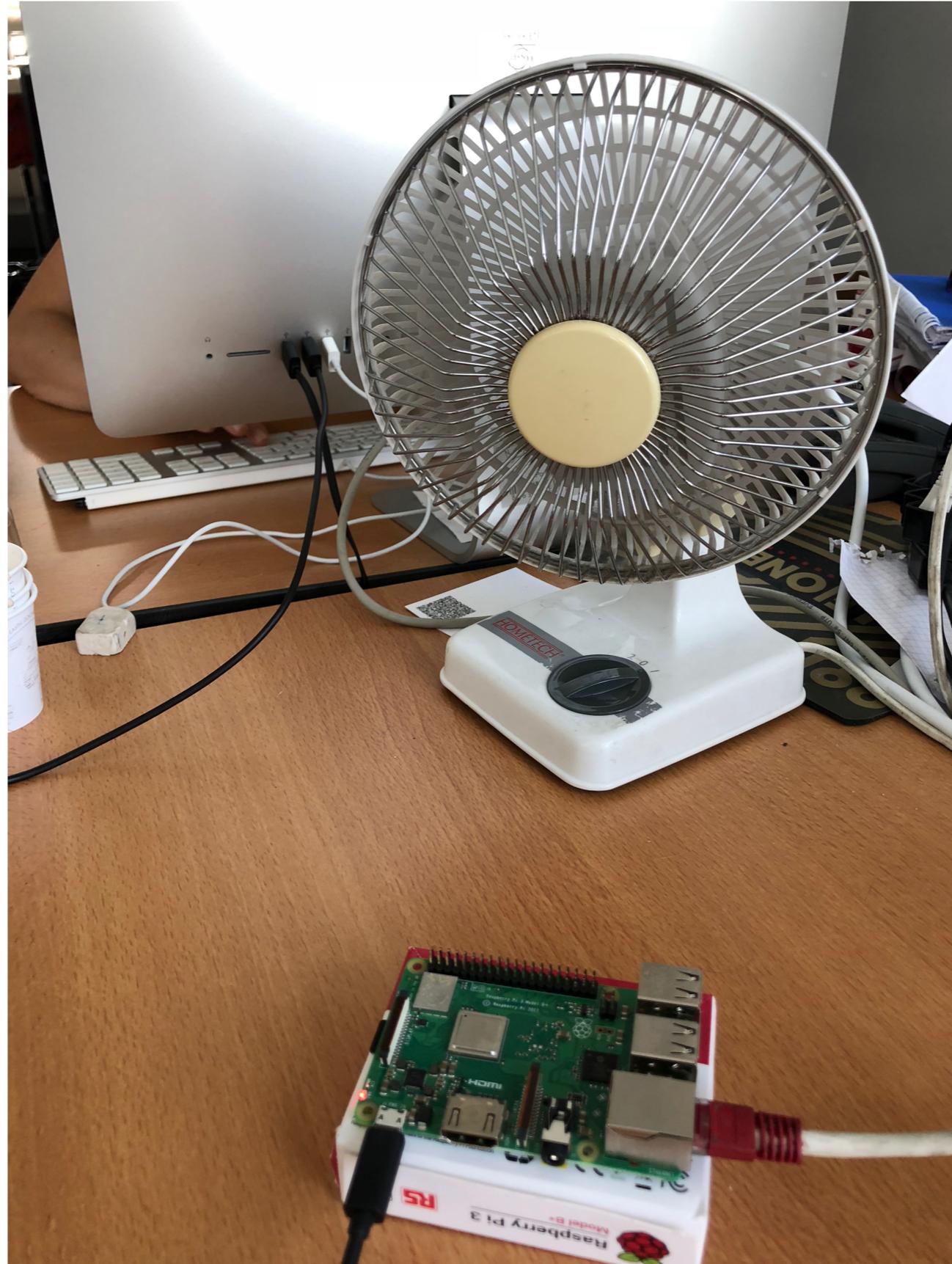


# acts



A. Salzburger



# Building

```
Scanning dependencies of target LayerCreatorTests
[ 99%] Building CXX object Tests/Tools/MakeFiles/LayerCreatorTests.dir/LayerCreatorTests.cpp.o
[ 99%] Linking CXX executable LayerCreatorTests
[ 99%] Built target LayerCreatorTests
[ 99%] Linking CXX executable ClusterizationTests
[100%] Built target ClusterizationTests
```

**acts-core** builds **w/o problem\*** after Eigen and boost installation

**\*only if you create a swap space:**

```
pi@raspberrypi:~ $ sudo dd if=/dev/zero of=/home/swap1 bs=1024
count=1024000
1024000+0 records in
1024000+0 records out
1048576000 bytes (1.0 GB, 1000 MiB) copied, 52.8363 s, 19.8 MB/s
pi@raspberrypi:~ $ sudo chown root:root /home/swap1
pi@raspberrypi:~ $ sudo chmod 0600 /home/swap1
pi@raspberrypi:~ $ sudo mkswap /home/swap1
Setting up swapspace version 1, size = 1000 MiB (1048571904 bytes)
no label, UUID=a475a383-c63d-403d-b8b4-c8134773ebd0
pi@raspberrypi:~ $ sudo swapon /home/swap1
```

# Running

```
pi@raspberrypi:~/acts/core-build/Tests/Extrapolator $ time ./MaterialCollectionTests
Running 10 test cases...

*** No errors detected

real    0m4.298s
user    0m4.278s
sys     0m0.020s
```

**acts-core/Tests** runs **w/o problems\***

**\*if you switch off Eigen vectorization:**

```
if (ACTS_BUILD_DD4HEP_PLUGIN)
  set (ACTS_BUILD_TGEO_PLUGIN ON)
endif()

# required packages

find_package(Boost 1.62 REQUIRED COMPONENTS program_options unit_test_framework)
find_package(Eigen 3.2.9 REQUIRED)

# Eigen adaption for ARM (DO NOT IMPORT!!!)
add_definitions(-DEIGEN_DONT_VECTORIZE=1)
add_definitions(-DEIGEN_DISABLE_UNALIGNED_ARRAY_ASSERT=1)
```

# Comparing

```
pi@raspberrypi:~/acts/core-build/Tests/Extrapolator $ time ./MaterialCollectionTests
Running 10 test cases...

*** No errors detected

real    0m4.298s
user    0m4.278s
sys     0m0.020s
```



```
andimacbookpro:bin salzburg$ time ./MaterialCollectionTests
Running 10 test cases...

*** No errors detected

real    0m0.089s
user    0m0.039s
sys     0m0.016s
```

