Laboratorio 2

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Autovectorización

```
gcc -O1 -ftree-vectorize -fopt-info-vec -fopt-info-vec-missed
wtime.c mtwister.c tiny_mc.c -lm
```

Autovectorización

- tiny_mc.c:107:5: missed: couldn't vectorize loop

Autovectorización

- tiny_mc.c:107:5: missed: couldn't vectorize loop
- tiny_mc.c:107:5: missed: not vectorized: multiple nested loops.

Autovectorización

- tiny_mc.c:107:5: missed: couldn't vectorize loop
- tiny_mc.c:107:5: missed: not vectorized: multiple nested loops.
- tiny_mc.c:78:16: missed: couldn't vectorize loop

Autovectorización

- tiny_mc.c:107:5: missed: couldn't vectorize loop
- tiny_mc.c:107:5: missed: not vectorized: multiple nested loops.
- tiny_mc.c:78:16: missed: couldn't vectorize loop
- tiny_mc.c:78:16: missed: not vectorized: control flow in loop.

Autovectorización

- tiny_mc.c:107:5: missed: couldn't vectorize loop
- tiny_mc.c:107:5: missed: not vectorized: multiple nested loops.
- tiny_mc.c:78:16: missed: couldn't vectorize loop
- tiny_mc.c:78:16: missed: not vectorized: control flow in loop.
- tiny_mc.c:71:9: missed: couldn't vectorize loop

Autovectorización

- tiny_mc.c:107:5: missed: couldn't vectorize loop
- tiny_mc.c:107:5: missed: not vectorized: multiple nested loops.
- tiny_mc.c:78:16: missed: couldn't vectorize loop
- tiny_mc.c:78:16: missed: not vectorized: control flow in loop.
- tiny_mc.c:71:9: missed: couldn't vectorize loop
- tiny_mc.c:71:9: missed: not vectorized: number of iterations cannot be computed.

Autovectorización

```
    for (unsigned int i = 0; i < PHOTONS; ++i) {
        photon(r);
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        if (weight < 0.001f) { /* roulette */
            if ((float)genRand(&r) > 0.1f) {
                break;
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                break;
```

```
        do {

            xi1 = 2.0f * genRand(&r) - 1.0f;
            xi2 = 2.0f * genRand(&r) - 1.0f;
            t = xi1 * xi1 + xi2 * xi2;

        } while (1.0f < t);
```