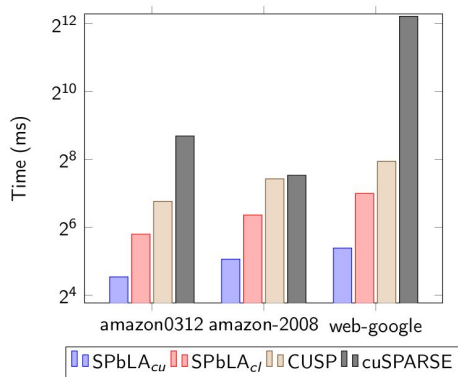
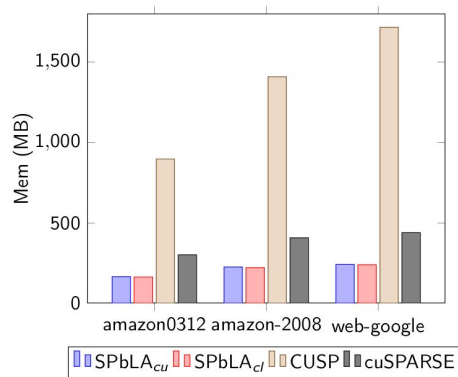


# SPbLA: GPGPU-Powered Sparse Boolean Linear Algebra

- Python-package and C API
- CUDA and OpenCL backend
- Available at GitHub: <https://github.com/JetBrains-Research/spbla>
- Far future: multi-GPU GraphBLAS development?



Matrix-matrix multiplication performance



```
import pyspbla as sp

def transitive_closure(a: sp.Matrix):
    t = a.dup()
    total = 0

    while total != t.nvals:
        total = t.nvals
        t.mxm(t, out=t, accumulate=True)

    return t
```

Transitive closure with **pyspbla**