Missing references:

1. A recursive algorithm for computing matrix closure via Gauss-Jordan elimination (easily translated to Gaussian elimination/LU factorization) with the same bandwidth cost as a 3D algorithm was given for the PRAM model by Aggarwal, Chandra, and Snir [2].

2. A non-pivoted LU factorization algorithm with the same cost as 2.5D LU (better latency cost by a $\log p$ factor) was given for the BSP model by Tiskin in [4].

3. An LU factorization algorithm with pairwise pivoting with the same cost as 2.5D LU (better latency cost by a $\log p$ factor) was given for the BSP model by Tiskin in [5].

4. References to the broadcast-based 2D matrix multiplication algorithm which cite SUMMA, should also have cited Agarwal, Balle, Gustavson, Joshi, and Palkar [1] as this was a special case of their algorithm.

Technical errors:

1. The lower bound for the communication-synchronization tradeoff in Section 4 fails to take into account potential overlap between communication of the different blocks. This oversight is addressed in more detail in [3].

References

[1] R. C. Agarwal, S. M. Balle, F. G. Gustavson, M. Joshi, and P. Palkar. A three-dimensional approach to parallel matrix multiplication. *IBM J. Res. Dev.*, 39:575–582, September 1995.

[2] Alok Aggarwal, Ashok K. Chandra, and Marc Snir. Communication complexity of PRAMs. *Theoretical Computer Science*, 71(1):3 – 28, 1990.

[3] Edgar Solomonik, Erin Carson, Nicholas Knight, and James Demmel. *Tradeoffs Between Synchronization, Communication, and Computation in Parallel Linear Algebra Computations*, pages 307–318. SPAA '14. ACM, New York, NY, USA, 2014.

[4] A. Tiskin. Bulk-synchronous parallel Gaussian elimination. *Journal of Mathematical Sciences*, 108:977–991, 2002.

[5] Alexander Tiskin. Communication-efficient parallel generic pairwise elimination. *Future Generation Computer Systems*, 23(2):179 – 188, 2007.