

Conclusions and bibliography

Conclusions

- combines Newton-Raphson-like behaviors with *average-consensi*
- converges to global optimum (convexity and smoothness assumptions)
- does not require network topology knowledge
- minimal agents synchronization (symmetric gossip like)
- extremely simple to be implemented
- numerically faster than Subgradient methods but slower than Alternating Direction Method of multipliers

Bibliography

Zanella et al., *Newton-Raphson consensus for distributed convex optimization*, CDC 2011

Zanella et al., *Multidimensional Newton-Raphson consensus for distributed convex optimization*, ACCC 2012 (submitted)