Publications of Yuval Emek
(with links to papers)

Journals

1. **Lower-Stretch Spanning Trees.**
   Michael Elkin, Yuval Emek, Daniel A. Spielman, and Shang-Hua Teng.

2. **Approximating Minimum Max-Stretch Spanning Trees on Unweighted Graphs.**
   Yuval Emek and David Peleg.

3. **Broadcasting Time in UDG Radio Networks with Unknown Topology.**
   Yuval Emek, Leszek Gasieniec, Erez Kantor, Andrzej Pelc, David Peleg, and Chang Su.

4. **A Tight Upper Bound on the Probabilistic Embedding of Series-Parallel Graphs.**
   Yuval Emek and David Peleg.

5. **A Near-Linear Time Algorithm for Computing Replacement Paths in Planar Directed Graphs.**
   Yuval Emek, David Peleg, and Liam Roditty.

6. **k-Outerplanar Graphs, Planar Duality, and Low Stretch Spanning Trees.**
   Yuval Emek.

7. **On the Additive Constant of the k-Server Work Function Algorithm.**
   Yuval Emek, Pierre Fraigniaud, Amos Korman, and Adi Rosen.

8. **Online Computation with Advice.**
   Yuval Emek, Pierre Fraigniaud, Amos Korman, and Adi Rosen.

9. **New Bounds for the Controller Problem.**
   Yuval Emek and Amos Korman.

10. **Sparse Reliable Graph Backbones.**
    Shiri Chechik, Yuval Emek, Boaz Patt-Shamir, and David Peleg.
11. **SINR Diagrams: Convexity and Its Applications in Wireless Networks.**
   Chen Avin, Yuval Emek, Erez Kantor, Zvi Lotker, David Peleg, and Liam Roditty.

12. **Online Set Packing.**
   Yuval Emek, Magnus M. Halldorsson, Yishay Mansour, Boaz Patt-Shamir, Jaikumar Radhakrishnan, and Dror Rawitz.

13. **Bayesian Ignorance.**
   Noga Alon, Yuval Emek, Michal Feldman, and Moshe Tennenholtz.

14. **Computing Optimal Contracts in Combinatorial Agencies.**
   Yuval Emek and Michal Feldman.

15. **Adversarial Leakage in Games.**
   Noga Alon, Yuval Emek, Michal Feldman, and Moshe Tennenholtz.

16. **Signaling Schemes for Revenue Maximization.**
   Yuval Emek, Michal Feldman, Iftah Gamzu, Renato Paes Leme, and Moshe Tennenholtz.

17. **Economical Graph Discovery.**
   Noga Alon, Yuval Emek, Michal Feldman, and Moshe Tennenholtz.

18. **How Many Ants Does It Take To Find the Food?**
   Yuval Emek, Tobias Langner, David Stolz, Jara Uitto, and Roger Wattenhofer.

19. **Space-Constrained Interval Selection.**
   Yuval Emek, Magnus M. Halldorsson, and Adi Rosen.

20. **On the Effect of the Deployment Setting on Broadcasting in Euclidean Radio Networks.**
    Yuval Emek, Erez Kantor, and David Peleg.

21. **Semi-Streaming Set Cover.**
    Yuval Emek and Adi Rosen.
22. **Minimum Cost Perfect Matching with Delays for Two Sources.**
   Yuval Emek, Yaacov Shapiro, and Yuyi Wang.

23. **Stable Secretaries.**
   Yakov Babichenko, Yuval Emek, Michal Feldman, Boaz Patt-Shamir, Ron Peretz, and Rann Smorodinsky.

24. **Approximating Generalized Network Design under (Dis)economies of Scale with Applications to Energy Efficiency.**
   Yuval Emek, Shay Kutten, Ron Lavi, and Yangguang Shi.

### Refereed conferences

1. **Approximating Minimum Max-Stretch Spanning Trees on Unweighted Graphs.**
   Yuval Emek and David Peleg.

2. **Lower-Stretch Spanning Trees.**
   Michael Elkin, Yuval Emek, Daniel A. Spielman, and Shang-Hua Teng.
   *(Invited to STOC 2005’s special issue in SICOMP.)*

3. **A Tight Upper Bound on the Probabilistic Embedding of Series-Parallel Graphs.**
   Yuval Emek and David Peleg.

4. **Broadcasting in UDG Radio Networks with Unknown Topology.**
   Yuval Emek, Leszek Gasieniec, Erez Kantor, Andrzej Pelc, David Peleg, and Chang Su.
   *(Invited to PODC 2007’s special issue in DistComp.)*

5. **A Near-Linear Time Algorithm for Computing Replacement Paths in Planar Directed Graphs.**
   Yuval Emek, David Peleg, and Liam Roditty.
   *(Invited to SODA 2008’s special issue in TALG.)*
Yuval Emek, Erez Kantor, and David Peleg.

7. Online Computation with Advice.
Yuval Emek, Pierre Fraigniaud, Amos korman, and Adi Rosen.
(Invited to ICALP 2009’s special issue in TCS.)

Chen Avin, Yuval Emek, Erez Kantor, Zvi Lotker, David Peleg, and Liam Roditty.

Yuval Emek.
(Invited to ESA 2009’s special issue in Algorithmica.)

10. On the Additive Constant of the k-Server Work Function Algorithm.
Yuval Emek, Pierre Fraigniaud, Amos korman, and Adi Rosen.

11. New Bounds for the Controller Problem.
Yuval Emek and Amos Korman.
(Invited to DISC 2009’s special issue in DistComp.)

Yuval Emek and Michal Feldman.

13. Adversarial Leakage in Games.
Noga Alon, Yuval Emek, Michal Feldman, and Moshe Tennenholtz.

14. Sparse Reliable Graph Backbones.
Shiri Chechik, Yuval Emek, Boaz Patt-Shamir, and David Peleg.
15. Bayesian Ignorance.
Noga Alon, Yuval Emek, Michal Feldman, and Moshe Tennenholtz.

Yuval Emek, Magnus M. Halldorsson, Yishay Mansour, Boaz Patt-Shamir, Jaikumar Radhakrishnan, and Dror Rawitz.
(Invited to PODC 2010’s special issue in DistComp.)

17. Efficient Threshold Detection in a Distributed Environment.
Yuval Emek and Amos Korman.

18. Economical Graph Discovery.
Noga Alon, Yuval Emek, Michal Feldman, and Moshe Tennenholtz.

Yuval Emek, Amos Korman, and Yuval Shavitt.

Yuval Emek, Ron Karidi, Moshe Tennenholtz, and Aviv Zohar.

21. Notions of Connectivity in Overlay Networks.
Yuval Emek, Pierre Fraigniaud, Amos Korman, Shay Kutten, and David Peleg.

22. Signaling Schemes for Revenue Maximization.
Yuval Emek, Michal Feldman, Iftah Gamzu, Renato Paes Leme, and Moshe Tennenholtz.
23. Space-Constrained Interval Selection.
   Yuval Emek, Magnus M. Halldorsson, and Adi Rosen.

   Yuval Emek and Roger Wattenhofer.

25. Frequency Hopping against a Powerful Adversary.
   Yuval Emek and Roger Wattenhofer.

26. Semi-Streaming Set Cover.
   Yuval Emek and Adi Rosen.

   Yuval Emek, Jochen Seidel, and Roger Wattenhofer.

28. Solving the ANTS problem with Asynchronous Finite State Machines.
   Yuval Emek, Tobias Langner, Jara Uitto, and Roger Wattenhofer.

   Yuval Emek, Christoph Pfister, Jochen Seidel, and Roger Wattenhofer.

30. How Many Ants Does It Take To Find the Food?
   Yuval Emek, Tobias Langner, David Stolz, Jara Uitto, and Roger Wattenhofer.
   (Invited to SIROCCO 2014’s special issue in TCS.)

31. The Price of Matching with Metric Preferences.
   Yuval Emek, Tobias Langner, and Roger Wattenhofer.
32. **Online Matching: Haste makes Waste!**  
Yuval Emek, Shay Kutten, and Roger Wattenhofer.  

33. **Dynamic Networks of Finite State Machines.**  
Yuval Emek and Jara Uitto.  
* (Invited to SIROCCO 2016’s special issue in TCS.)

34. **Exploring an Infinite Space with Finite Memory Scouts.**  
Lihi Cohen, Yuval Emek, Oren Louidor, and Jara Uitto.  

35. **Minimum Cost Perfect Matching with Delays for Two Sources.**  
Yuval Emek, Yaacov Shapiro, and Yuyi Wang.  
* (Invited to CIAC 2017’s special issue in TCS.)

36. **Stable Secretaries.**  
Yakov Babichenko, Yuval Emek, Michal Feldman, Boaz Patt-Shamir, Ron Peretz, and Rann Smorodinsky.  

37. **A Tight Lower Bound for the Capture Time of the Cops and Robbers Game.**  
Sebastian Brandt, Yuval Emek, Jara Uitto, and Roger Wattenhofer.  

38. **Efficient Jobs Dispatching in Emerging Clouds.**  
Shimon Bitton, Yuval Emek, and Shay Kutten.  

39. **Approximating Generalized Network Design under (Dis)economies of Scale with Applications to Energy Efficiency.**  
Yuval Emek, Shay Kutten, Ron Lavi, and Yangguang Shi.  

40. **Selecting a Leader in a Network of Finite State Machines.**  
Yehuda Afek, Yuval Emek, and Noa Kolikant.

41. The Synergy of Finite State Machines.
Yehuda Afek, Yuval Emek, and Noa Kolikant.

42. The Price of Clustering in Bin-Packing with Applications to Bin-Packing with Delays.
Yossi Azar, Yuval Emek, Rob van Stee, and Danny Vainstein.

43. Deterministic Leader Election in Programmable Matter.

44. Online Disjoint Set Cover without Prior Knowledge.
Yuval Emek, Adam Goldbraikh, and Erez Kantor.

45. Bayesian Generalized Network Design.
Yuval Emek, Shay Kutten, Ron Lavi, and Yangguang Shi.

46. Distributed Algorithms for Low Stretch Spanning Trees.
Ruben Becker, Yuval Emek, Mohsen Ghaffari, and Christoph Lenzen.

47. Message Reduction in the LOCAL Model is a Free Lunch.
Shimon Bitton, Yuval Emek, Taisuke Izumi, and Shay Kutten.

48. Towards Distributed Two-Stage Stochastic Optimization.
Yuval Emek, Noga Harlev, and Taisuke Izumi.

49. Low Diameter Graph Decompositions by Approximate Distance Computation.
Ruben Becker, Yuval Emek, and Christoph Lenzen.