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[IEEE WCNC 2016 - Track 1- PHY and Fundamentals] Your paper #1570220094 ('A **Novel Link Scheduling Algorithm for Wireless Networks using Directional** Antenna')

4 封邮件

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2015年12月18日 下午4:49

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Dear Mr. Tang Zhaoshu:

We are pleased to inform you that your paper #1570220094, 'A Novel Link Scheduling Algorithm for Wireless Networks using Directional Antenna', has been accepted for presentation at the 2016 IEEE Wireless Communications and Networking Conference (WCNC) -- http://wcnc2016.ieee-wcnc.org/

A total of 964 papers were submitted to IEEE WCNC 2016. Your paper is among the 467 papers accepted after careful consideration -- congratulations! Among the 467 accepted papers, a majority will be presented in a lecture style and some will be presented as poster papers. This distinction has no relationship with the quality of the accepted papers whatsoever. Accepted and presented papers will be published in the IEEE WCNC 2016 conference proceedings and submitted to IEEE Xplore® without any indication of the presentation mode.

The reviews are given below; they can also be found at http://edas.info/showPaper.php?m=1570220094. We recommend that you revise your paper to address the reviewers' comments and suggestions.

The Final Paper Submission Instructions are posted at http://wcnc2016.ieee-wcnc.org/authors.

To submit your Final paper, please go to EDAS, click on the "My Papers" button, and then upload your paper on the link provided. DO NOT go to Papers/Submit paper, because you will not find IEEE WCNC 2016 there. Please use IEEE PDF eXpress to check if your paper is IEEE Xplore® compatible as described at the website.

To be published in the IEEE WCNC 2016 conference proceedings and submitted to IEEE Xplore®, an author of an accepted paper is required to register for the conference at the full (member or non-member) rate and the paper must be presented by an author of that paper at the conference unless the TPC co-chairs grant permission for a substitute presenter before the conference opens. Non-refundable registration fees must be paid prior to uploading the final IEEE formatted, publication-ready version of the paper. For authors presenting multiple papers, one full registration is valid for up to three papers. Accepted and presented papers will be published in the IEEE WCNC 2016 conference proceedings and submitted to IEEE Xplore®.

Your final paper must be submitted by 12 January 2016. The maximum number of pages is seven (additional 100\$ for the seventh page).

Congratulations once again for having your paper accepted to IEEE WCNC 2016, a flagship conference of the IEEE Communications Society. We look forward to seeing you in Qatar.

Sincerely,

IEEE WCNC 2016 PHY Track Co-chairs:

Zaher Dawy, American University of Beirut, Lebanon Xiaodai Dong, University of Victoria, Canada George Karagiannidis, Aristotle University of Thessaloniki, Greece Meixia Tao, Shanghai Jiao Tong University, China

===== Review 1 ======

> *** Strong Aspects: Comments to the author: What are the strong aspects of the paper?

Developing models for directional antennas in networks is interesting.

> *** Weak Aspects: Comments to the author: What are the weak aspects of the paper?

There is not much novelty and unexpected results in this work. It was expected that directional antennas will surpass omni antennas.

> *** Recommended Changes: Recommended changes. Please indicate any changes that should be made to the paper if accepted.

The main contributions are hard to see and need to be highlighted.

> *** Relevance and Timeliness: Rate the importance and timeliness of the topic addressed in the paper within its area of research.

Acceptable. (3)

> *** Technical Content and Scientific Rigour: Rate the technical content of the paper (e.g.: completeness of the analysis or simulation study, thoroughness of the treatise, accuracy of the models, etc.), its soundness and scientific rigour.

Valid work but limited contribution. (3)

- > *** Novelty and Originality: Rate the novelty and originality of the ideas or results presented in the paper. Some interesting ideas and results on a subject well investigated. (3)
- > *** Quality of Presentation: Rate the paper organization, the quality of text, English, and figures and the completeness and accuracy of references.

Readable, but revision is needed in some parts. (3)

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====== Review 2 ======
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> *** Strong Aspects: Comments to the author: What are the strong aspects of the paper?

In this work studies the problem of determining the throughput capacity of a wireless network. Authors propose a scheduling algorithm to achieve this capacity within an approximation factor. The analysis is performed in the easy interference model and absolutey random topology. The problem what descried in the paper is common and have not the best solution. The proposed aloruthm is one of possible to increase the network performance. The math model has good level and clear enough to undestand the results.

> *** Weak Aspects: Comments to the author: What are the weak aspects of the paper?

The assumtion using by authors are not enogh realistic and simplified to talk about effective algorithm for OSML. The simulation model is not clear and it's not clear how to resultig comparation graphs were built.

> *** Recommended Changes: Recommended changes. Please indicate any changes that should be made to the paper if accepted.

More detailed simulation has to be described. The correctness of comparation has to be explained.

> *** Relevance and Timeliness: Rate the importance and timeliness of the topic addressed in the paper within its area of research.

Acceptable. (3)

> *** Technical Content and Scientific Rigour: Rate the technical content of the paper (e.g.: completeness of the analysis or simulation study, thoroughness of the treatise, accuracy of the models, etc.), its soundness and scientific rigour.

Valid work but limited contribution. (3)

- > *** Novelty and Originality: Rate the novelty and originality of the ideas or results presented in the paper. Some interesting ideas and results on a subject well investigated. (3)
- > *** Quality of Presentation: Rate the paper organization, the quality of text, English, and figures and the completeness and accuracy of references.

Substantial revision work is needed. (2)

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===== Review 3 ======
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> *** Strong Aspects: Comments to the author: What are the strong aspects of the paper?

- (1) In this work, the authors consider link scheduling problem in the context of directional antenna. To facilitate the analysis, a directional interference model is developed. Based on this model, a scheduling algorithm is proposed to select a group of links that can communicate simultaneously without severe inter-link interference, i.e. "affectedness" defined in this paper. Then, correctness and performance analysis of the proposed algorithm are followed. Finally, numerical simulation shows the great advantage of using directional antenna on enlarging the number of feasible links which can do simultaneous data transmission.
- (2) This paper is a pioneering work in a sense that it considers the OSML problem in the directional antenna scenario instead of the traditional omnidirectional antenna scenario.
- (3) This paper is organized quite well.
- > *** Weak Aspects: Comments to the author: What are the weak aspects of the paper?
- (1) The proposed OSML algorithm almost searches all the links iteratively to yield the final output in a centralized fashion. However, complexity, a significantly important performance metric to evaluate the algorithm, is not mentioned and not analyzed.
- (2) The gist of this paper is indistinct. It aims to show the superiority of the directional antennas in OSML or to show the superiority of the proposed link scheduling algorithm.
- > *** Recommended Changes: Recommended changes. Please indicate any changes that should be made to the paper if accepted.
- (1) Further revision on grammar and details is suggested, e.g. the meaning of notation 'S' in Eq. (1) is missing; 'as(lu)' should be 'As(lu)' in Algorithm line 22; 'A(Ringk)/A(Dw) ' should be 'A(EXRingk)/A(Dw)' in correctness analysis.
- (2) Citation style is improper and not uniform
- (3) Fig. 7 tells the performance of the proposed algorithm is worse than that of the existing algorithm in high-density network. The authors should give the reason.
- (4) Existing literatures, such as [8], already proposed algorithms to solve the link scheduling problem in directional antenna scenario. When it comes to performance comparison, the authors just compare the performance of the proposed algorithm with the link scheduling algorithm specially designed for omnidirectional antennas [2]. The simulation results, e.g. fig 6, show more links can be scheduled via this paper's way. The authors should give the analysis on this great improvement is mainly benefited by the proposed link scheduling algorithm or the directional
- > *** Relevance and Timeliness: Rate the importance and timeliness of the topic addressed in the paper within its area of research. Good. (4)
- > *** Technical Content and Scientific Rigour: Rate the technical content of the paper (e.g.: completeness of the analysis or simulation study, thoroughness of the treatise, accuracy of the models, etc.), its soundness and scientific rigour.
- > *** Novelty and Originality: Rate the novelty and originality of the ideas or results presented in the paper. Significant original work and novel results. (4)
- > *** Quality of Presentation: Rate the paper organization, the quality of text, English, and figures and the completeness and accuracy of references.

Readable, but revision is needed in some parts. (3)

WANG Lei (Ray) <lei.wang@ieee.org>

Solid work of notable importance. (4)

2015年12月18日 下午5:50

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祝贺!

王雷

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谢谢王老师。抱歉回复晚了,才看到。

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唐兆树

[引用文字已隐藏]

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