

## Accepted Manuscript

A simple description of near-field and far-field diffraction

Wipawee Temnuch, Sarayut Deachapunya, Pituk Panthong, Surasak Chiangga,  
Sorakrai Srisuphaphon



PII: S0165-2125(18)30010-6

DOI: <https://doi.org/10.1016/j.wavemoti.2018.01.002>

Reference: WAMOT 2220

To appear in: *Wave Motion*

Received date : 24 April 2017

Revised date : 28 December 2017

Accepted date : 8 January 2018

Please cite this article as: W. Temnuch, S. Deachapunya, P. Panthong, S. Chiangga, S. Srisuphaphon, A simple description of near-field and far-field diffraction, *Wave Motion* (2018), <https://doi.org/10.1016/j.wavemoti.2018.01.002>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Highlights

1. We present the simple method for explanation both the near-field and far-field diffractions with the same expressions.
2. Our method is based on the Huygens' principle alone.
3. Our method can identify the boundary between the near-field and far-field diffractions.
4. Our method is verified nicely by both the near-field and far-field, i.e. The Talbot effect, the single slit and the double-slit diffraction.

Download English Version:

<https://daneshyari.com/en/article/8256779>

Download Persian Version:

<https://daneshyari.com/article/8256779>

[Daneshyari.com](https://daneshyari.com)