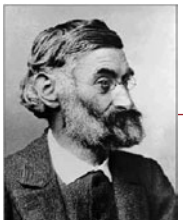
Volume 15 Number 6 December 2009

Microscopy AND Microanalysis

table of contents preview

Microscopy and Microanalysis website:
http:journals.cambridge.org/MAM

Indexed in Chemical Abstracts, Current Contents, BIOSIS, and MEDLINE (PubMed)



Dear Abbe

Humor

Dear Abbe,

I just heard of a technique to obtain a super-resolution image from a series of low-resolution shifted images: Basically, you extract details from sub-pixel shifts in the image. My understanding is that it could be useful for microscopy, but only for under-sampled images where the limiting factor is the pixel size and not the diffraction. Is is true that you can't break the diffusion barrier with this method?
Christophe in Marseille

Dear Christophe,

My answer to this can be summed up in a single acronym TANSTAAFM or "There Ain't No Such Thing As A Free Mittagessen." A high-resolution image being obtained from a bunch of images of inferior quality? That is like saying one could create a single Hedy Lamar simply by shifting around a half dozen Uma Thurmans. Not that I wouldn't mind trying this with Uma, but I just don't think that it is possible. As for breaking through the diffusion barrier, I have seen this done only once. My dear friend Johann Zöllner once drank so many Altbiers that he actually began to pee a fine Pilsner. Hmmm, I wonder if Uma would be interested in meeting Johann?

Dear Abbe,

I heard that the BBC is planning a special documentary on the history of microscopy. I was wondering if you have been contacted by them, and if so what role would you play?
Curious in Curacao

Dear Curious,

I don't know how you found out about this (all participants were required to sign a non-disclosure waiver AND do a pinky swear), but the answer is yes, and I have been offered the starring role of Antonie van Leeuwenhoek. At first I declined, but when they told me that Kate Hudson had signed on to play the part of Mrs. van Leeuwenhoek and that the screenplay called for a tender love scene in which I examine her for microscopic parasites, I could no longer demur. Regrettably, when we were two weeks into production, Ms. Hudson had to back out and was hastily replaced by comedienne Mo'Nique who had markedly less acting experience and virtually no knowledge whatsoever about the use of Rayleigh distribution of wavelengths in achromatic lens design. The program is to be released in June, but I am not happy with the outcome.

Having trouble sleeping at night worrying about technique? Can't seem to find the right words to say to your technicians? Let Abbe have a whack at it. What could go wrong? Send your posers to his assistant at jpshields@cb.uga.edu.

 doi: 10.1017/S155192950999109X