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Subject: LDA

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Hi!

I was lurking again at the LDA description paper and there is a mathematical detail I can't understand.

In the equation (2), $p(\theta, z, w | \alpha, \beta)$ is computed. Then it is marginalized by integrating over θ and summing over z . At this point, I don't get how he makes the switch between the sum and the product, replacing by the way, z in the sum by z_n . Thus,

$\sum_z \sum_n p(z_n | \theta) p(w_n | z_n, \beta) \Rightarrow \sum_n \sum_{z_n} \dots$

Did you get that ? if so, I would be delighted to hear (or read, more precisely) your point of view because it's progressively making me mad...

See you.

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