

Divergent plate margins: Rift formation, propagation, and evolution

Seminar info and schedule

For the spring of 2017 we'll discuss divergent plate margins, including the formation of rifts, their propagation, and their evolution.

Seminars will take place at 12-14 in room **D501** of the Exactum. You may also want to see [more information about the general format of the seminar](#).

A tentative schedule of readings is below.

Date	Discussion leader(s)	Topic and papers	Paper rating
19.1.2017	n/a	Organizational meeting	
2.2.2107	Dharmindar	<p>Continental break-up</p> <ul style="list-style-type: none"> Ebinger, C., 2005. Continental break-up: the East African perspective. <i>Astronomy & Geophysics</i>, 46(2), pp.2-16 <p>Supplemental reading</p> <ul style="list-style-type: none"> None 	3.6
9.2.2017	Dave	<p>Magma-poor versus volcanic rifted margins</p> <ul style="list-style-type: none"> Franke, D., 2013. Rifting, lithosphere breakup and volcanism: Comparison of magma-poor and volcanic rifted margins. <i>Marine and Petroleum geology</i>, 43, pp.63-87 <p>Supplemental reading</p> <ul style="list-style-type: none"> Ziegler, P.A. and Cloetingh, S., 2004. Dynamic processes controlling evolution of rifted basins. <i>Earth-Science Reviews</i>, 64(1), pp.1-50 	3.2
16.2.2017	Jorina	<p>Dynamics of rifting</p> <ul style="list-style-type: none"> Ziegler, P.A. and Cloetingh, S., 2004. Dynamic processes controlling evolution of rifted basins. <i>Earth-Science Reviews</i>, 64(1), pp.1-50 (only sections 1-3) <p>Supplemental reading</p> <ul style="list-style-type: none"> None 	3.8
23.2.2017	Lars	<p>Dynamic models of rifting</p> <ul style="list-style-type: none"> Schmeling, H., 2010. Dynamic models of continental rifting with melt generation. <i>Tectonophysics</i>, 480(1), pp.33-47 <p>Supplemental reading</p> <ul style="list-style-type: none"> None 	4.1
16.3.2017	Dave	<p>How is extension distributed in the lithosphere?</p> <ul style="list-style-type: none"> Huisman, R.S. and Beaumont, C., 2014. Rifted continental margins: the case for depth-dependent extension. <i>Earth and Planetary Science Letters</i>, 407, pp.148-162 <p>Supplemental reading</p> <ul style="list-style-type: none"> Huisman, R. and Beaumont, C., 2011. Depth-dependent extension, two-stage breakup and cratonic underplating at rifted margins. <i>Nature</i>, 473(7345), pp.74-78 	3.7
30.3.2017	Lotta	<p>Rifting of Wilson Cycle margins</p> <ul style="list-style-type: none"> Buiter, S.J. and Torsvik, T.H., 2014. A review of Wilson Cycle plate margins: A role for mantle plumes in continental break-up along sutures?. <i>Gondwana Research</i>, 26(2), pp.627-653 <p>Supplemental reading</p> <ul style="list-style-type: none"> None 	3.3

6.4.2017	Jorina	<p>Modelling the Greenland-Norway separation</p> <ul style="list-style-type: none"> • Mosar, J., Eide, E.A., Osmundsen, P.T., Sommaruga, A. and Torsvik, T.H., 2002. Greenland–Norway separation: a geodynamic model for the North Atlantic. <i>Norwegian Journal of Geology</i>, 82 <p>Supplemental reading</p> <ul style="list-style-type: none"> • None 	3.4
13.4.2017	Dharmindar	<p>Rifting and plume-lithosphere interaction</p> <ul style="list-style-type: none"> • Koptev, A., Calais, E., Burov, E., Leroy, S. and Gerya, T., 2015. Dual continental rift systems generated by plume-lithosphere interaction. <i>Nature Geoscience</i>, 8(5), pp.388-392 • Sleep, N.H., Ebinger, C.J. and Kendall, J.M., 2002. Deflection of mantle plume material by cratonic keels. <i>Geological Society, London, Special Publications</i>, 199(1), pp.135-150 <p>Supplemental reading</p> <ul style="list-style-type: none"> • None 	<p>Koptev: 3.8</p> <p>Sleep: 3.8</p>
20.4.2014	--	EGU presentation rehearsals	
18.5.2017	Lars	<p>Oblique rifting, transforms, and hyperextended margins</p> <ul style="list-style-type: none"> • Le Pourhiet, L., May, D.A., Huille, L., Watremez, L. and Leroy, S., 2017. A genetic link between transform and hyperextended margins. <i>Earth and Planetary Science Letters</i>, 465, pp.184-192 <p>Supplemental reading</p> <ul style="list-style-type: none"> • None 	

Papers under consideration

General background

- List of papers coming soon...