

Dear ABP colleagues and friends, I am very pleased to talk to you today. As this is my last speech as section leader after more than 10 years (and I do not have the possibility to show you the usual nice pictures from the section and the group from the last year), allow me few minutes to take some perspective and look briefly at the past before congratulating GianluigiA and the new ABP management team, wishing them all the best to guide us to write another excellent chapter of our group.

For those who do not know me well, I am Elias Métral, I am 49 years old and I am the happy father of 4 children. I had the honour and privilege to obtain the grade 9 three years ago, which we celebrated well of course with all the section and I would like to thank again all the team members of the past decade for their great help, all the people who helped me in my journey and our group leader of course: GianluigiA. During the last 15 years, I have been working in particular in very close collaboration with GianluigiA, with whom we tried to rebuild the expertise on impedance and collective effects. Many thanks GianluigiA for your support during all this time!

I come from the old PS division and when, at the beginning of the years 2000, the PS and SL divisions merged, I joined the “R&D and LHC collective effects” team led by an outstanding expert on collective effects, FrancescoR. At that time (between 2003 and 2006), we were only a few people working on impedance and collective effects as all the many previous world-famous experts retired: FrankZ, WernerH and his student TatianaP who joined at some point, helped by DanielS and AlexejG and FritzC (from the RF group). Fortunately, at the end of 2005, GiovanniR re-joined the team as staff member and since then we have been working together to try to rebuild a strong team. BenoitS rapidly joined us in 2006 and with him we re-built the impedance team (with the help of CarloZ in 2008 and NicolasM in 2009). When in 2007, our section leader FrancescoR passed away, we moved to the LIS section led by GianluigiA and in 2010 I had the honour to become the section leader of a new section on impedance and collective effects. I am very thankful to the past management for having allowed me to hire the many people we needed: we could be on average between 20 and 30 people over the last decade (with all the students and fellows, whose contributions were fundamental, and we were also helped a lot by excellent external collaborators). This team has become the biggest team in the world working on collective effects. Thanks to this critical mass we could participate to many studies and projects and bring important contributions, in the crucial time of the LHC Runs 1 and 2 and of the LHC Injectors Upgrade project. As concerns the current staff, XavierB and NicoloB joined the team already in 2010, GianniI in 2011 and LottaM in 2017.

Of course, I will have unfortunately no time to mention all the people who participated to this adventure, which is a pity as they all contributed to what we succeeded to achieve. But I do hope they know all that they will be always in my heart, that we are linked together forever and that they can always count on me as there is of course much more than only professional relations between us. I am delighted for having had the possibility to hire all the current 7 excellent staff members from the section (except GiovanniR). And I am also very happy for having had the possibility to participate to hire other (excellent) people who are still in the group and others (also excellent) who unfortunately could not remain with us. I would like to mention in particular some names and thank TatianaP who helped us a lot with all the beam-beam studies (with her supervisor WernerH and her student XavierB) and I am very happy that she recently got an important position at EPFL. I also think of KevinL who helped us a lot with the HEADTAIL code (initially written by GiovanniR and FrankZ) and who recently got an IC position in OP; ElenaB who is currently working for the TERA foundation, etc. We had also many excellent fellows who moved to other big labs like GSI, ESRF, DESY or SOLEIL. I would like to thank also all the experienced people I had the pleasure to supervise, ElenaW, WernerH, OlavB and FrankS, with whom it was always a pleasure to discuss to know more about CERN and its history. Their experience was very precious to me and the team as I always tried to find the proper balance between older and younger people, men and women, more theoretical and more pragmatic people, etc. It is such a great pleasure and privilege to be surrounded by so many brilliant people with excellent technical skills but also very good soft skills, with a lot of empathy and kindness. This is the case in the section but of course also within other sections of the group, with whom we were always working in close collaboration for both the current operation of the machines and the future projects or studies: with HannesB in particular for the Q20 optics, with StefanoR, RoderikB and team for the LHC collimators, with MassimoG, RogelioT and team for linear coupling and possible loss of Landau damping, with YannisP and team to find the proper trade-off between beam stability and dynamic aperture, with DanielS and FrankZ for FCC collective effects, with all the people working on simulation tools, etc.

When I started as section leader in 2010 I created 6 working groups on impedance, space charge, beam-beam, electron cloud, HEADTAIL development and beta beams. As I mentioned at that time, the idea was not to put boundaries around these activities but to follow these long-term activities, organising meetings with all the people interested from the section, from the group, but also from other groups and other departments, sharing all the info together, writing minutes (with actions), collecting references and giving more academic talks to help and re-build strong teams and facilitate the integration of the newcomers. These working groups are still alive (except the one on beta beams), and since then several other working groups were created. I think we can say that it was a great success and it participated to shape some part of the ABP group as it is today. I take the opportunity to thank all the people who were involved in all these working groups, in particular at the beginning when we had to launch all of them: this would not have been possible without a long-term vision and a wish to really share information between us and grow together. And I would like to thank OliverB, who was our group leader at that time, and who allowed me to do all this.

In 2010, the name of the section was ICE for Impedance and Collective Effects, where both coherent and incoherent aspects were studied. Then, it changed to HSC for Hadron Synchrotron Collective Effects in 2014 and then Hadron Synchrotron Coherent Effects in 2016, when the section was split in 2 with YannisP as new section leader to take care of the incoherent effects: he also took with him 2 working groups, beam-beam (led by him for some time) and space charge (now led by HannesB since 2018). Both working groups were already running for many years and I do hope this helped a lot YannisP and his team. As of 2021 the adventure of the section will continue with GiovanniR leading the CEI team for Collective Effects and Impedance and we will for sure write another important chapter on collective effects.

I love both beam dynamics and management, as well as leadership. What I love is to build something together, to imagine, create, develop, train teams, technically and in leadership, help them to grow both professionally but also personally. And I devoted all my enthusiasm and energy to do so. The section and the group was my top priority for the last decade and this is why I also declined to become a project leader, when Steve Myers and Paul Collier proposed it to me at some point. And I am therefore very grateful to GianluigiA for his constant positive evaluations as section leader and for having considered me as “a key member of the ABP management team”.

However, I also think that 10 years is quite long and that it is now a good time to change: I certainly brought to the section all I could and it is time for someone else to take over. And it is certainly good and healthy at CERN to have periods with management roles and periods without management roles, giving also the possibility to our younger colleagues (with the proper skills of course) to take some management roles. I invite all the people to do so but at all levels of course: section leaders but also group leaders and department heads and deputies to show the good example. This is what I mentioned when we discussed this subject in detail two years ago within the ABP management team. This would be indeed the proof of an excellent and trusty management, leading by the example.

For more than 10 years, we had weekly section meetings and I have been very proud of the atmosphere we could create in the team and the many results which were obtained but I was in particular very proud of the way they were obtained, paying attention (as much as we could) to always acknowledge the work and contributions from the others, trying to involve all the relevant people and with a willingness to work openly, with respect and constructively with all of them: for this I would like to thank in particular BenoitS for having always shown the good example since the very beginning of this adventure. I profit also to congratulate BenoitS for having been an excellent scientific secretary for the 7 years of Paul Collier as chairman of the LHC Machine Committee (since 2014). I have no time now to discuss in detail the many HSC highlights of the past year, but those interested can join us during the last HSC section meeting on Monday.

It was a great pleasure and honour for me to lead such a great team for one decade and have GiovanniR be part of it: it will now be a great pleasure for me to continue to work within the team and have GiovanniR as section leader and he knows that he can count on all my usual enthusiasm and energy. I wish him and the team all the best and I do hope that GiovanniR will continue to have even more responsibilities in the future (he has been a remarkable LIU Deputy Project Leader since 2014), as well as several members from the section who proved already that they have all the necessary skills.

To conclude, I would like to congratulate GianluigiA and YannisP for their new well-deserved nominations and wish them all the best in their key positions. Many thanks also, congratulations and all the best to RichardsS, remaining deputy group leader. Many thanks to the other past section leaders for all the work done, the many interesting discussions and the good time spent together during which we

tried to do our best for the group, sharing between us all the necessary information to take the best decisions together: AlessandraL, RobertoC and MassimoG, for whom I have a lot of respect and friendship since the time we were both supervisors of the PS, 20 years ago (and who was recently replaced by RogelioT). Many thanks to AlessiaV for all her help in various activities, to all the group members and CERN colleagues with whom I had the pleasure to interact and to the many collaborators from all over the world. Last but not least: good luck to the new team of section leaders, which looks like a great team. We do hope that you will continue to guide us in the good direction and further develop the biggest group on accelerator physics in the world!

Happy Christmas everybody! Kind regards, Elias (11/12/2020).



MCBI 2019 workshop in Zermatt (which we co-chaired with TatianaP): it was a bit cloudy that day but GiovanniR knows how to remove all the (e-)clouds ;-)