Research involving 3D point sets has attracted considerably more attention over the last few years in the computer vision community. The emergence of laser/lidar sensors, reliable multi-view stereo techniques and more recently consumer depth cameras have brought point clouds to the forefront as a data format useful for a number of applications, such as those listed above. The nature of 3D point clouds requires different data structures and processing methods than those used for 2D or 3D images; at the same time, point clouds provide efficient ways to address the large scale issues that can no longer be ignored in most practical applications. The aim of this workshop is to generate momentum around this topic of growing interest, and to encourage interdisciplinary interaction and collaboration from computer vision, computer graphics, geometry processing, robotics and photogrammetry.

The workshop seeks original high-quality research and application submissions in all aspects of processing and modeling from 3D point clouds. Suggested topics include, but are not limited to:

- point set processing
- geometry processing
- 3D scanning sensors, laser and lidar systems
- consumer depth cameras
- 3D sensor calibration
- point cloud from stereo and video
- feature and vanishing point detection
- shape and appearance modeling
- surface approximation and scene reconstruction
- 3D object recognition and classification
- large scale issues
- point set registration

Submissions should follow the CVPR formatting guidelines and will be reviewed by three members of the program committee. Accepted papers will be included in the proceedings of CVPR and will be archived by the IEEE Digital Library. In addition to regular papers, we also solicit posters and demos of relevant technologies. The review of posters and demos will be based on a short abstract. If accepted, they will be presented in a session that will allow research groups from academia and industry to demonstrate their technologies.

Important dates
Submission deadline: March 26, 2012
Submission deadline for posters and demos: April 20, 2012
Author notification: April 22, 2012
Camera-ready paper due: May 2, 2012
Workshop date: June 16, 2012

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For any questions regarding the workshop, please send an email to pcp2012workshop@gmail.com

More information online at http://www-sop.inria.fr/manifestations/pcp2012/